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**National Highway
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TRANSPORTATION RESEARCH CENTER

Indiana University
[redacted] Indiana [redacted]

ON-SITE AIR BAG INVESTIGATION

CASE NO. - 96-25
FLEET - PRIVATE VEHICLE
LOCATION - MISSISSIPPI
ACCIDENT DATE - [redacted] 1996

Submitted By:

[redacted]
Senior Staff Associate
and
[redacted]
Associate Scientist

[redacted] 1997

Revised Submission:

[redacted] 1997

Contract Number: DTNH22-94-D-17058

Prepared for:

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Technical Report Documentation Page

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TRC/IU Case No. 96-25		

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On-Site Air Bag Investigation Private Vehicle Location - Mississippi	[redacted] 1997; [redacted] 1997
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[redacted]	TRC/IU 96-25, Task 0067
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Indiana University Transportation Research Center [redacted] [redacted] Indiana [redacted]	11. Contract or Grant No. DTNH22-94-D-17058
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U.S. Department of Transportation (NRD-32) National Highway Traffic Safety Administration National Center for Statistics and Analysis Washington, D.C. 20590-0003	14. Sponsoring Agency Code

15. Supplementary Notes

On-site air bag deployment investigation involving a 1995 Ford Mustang, two-door coupe, with manual safety belts and dual front air bags, and a 1991 Ford Explorer XL, four-door, sport utility

16. Abstract

This report covers an on-site investigation of an air bag deployment crash that involved a 1995 Ford Mustang and a 1991 Ford Explorer XL. This crash is of special interest because the Mustang's unrestrained, right front passenger (6 year-old male) sustained fatal cervical injuries from his deploying air bag. The Mustang was traveling west in the westbound lane of a three-lane (i.e., westbound and eastbound through lanes and a bi-directional, left-hand, turn lane), undivided, city street. The Explorer which was also traveling west in the same, westbound lane of the city street. The front right bumper of the Mustang (case vehicle) impacted the back left of the Explorer (vehicle #2) causing the case vehicle's driver side and right front passenger side supplemental restraints (air bags) to deploy. The case vehicle's frontal damage indicates that, other than the direct damage to the top 5 centimeters (2.0 inches) of the front right bumper, the case vehicle primarily underrode the back of vehicle #2. The case vehicle was towed, but not due to damage, and vehicle #2 was driven from the scene. The case vehicle's driver (29 year-old female) was normally postured, with her seat track located between its middle and forward-most positions, and the tilt steering wheel was located between its middle and down-most positions. She was also restrained by her available, active, three-point, lap and shoulder belt and sustained according to her interview, minor integumentary injuries which included: an abrasion, a contusion, and a laceration to her anterior right forearm. The right front passenger (6 year-old male) was normally postured, with his seat track located between its middle and rearmost positions, and he was not wearing his available, active, three-point, lap and shoulder belt. He sustained, according to his medical records, fatal cervical and undetermined internal injuries which included: an undetermined cervical fracture (i.e., broken neck). In addition, he sustained abrasions to his right face and anterior neck and contusions to his anterior neck, left chest, and right shoulder and/or bilateral axillary areas. The cervical and integumentary injuries were caused by his deploying air bag. The existence of the internal injuries was not substantiated. In fact, no autopsy was performed to confirm any of the physician diagnoses. The right rear passenger (9 year-old male) was normally postured. The rear split bench seat is not adjustable, and he was also restrained by his available, active, three-point, lap and shoulder belt. According to the interview with the case vehicle's driver (i.e., mother), he did not sustain any injuries as a result of this crash.

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Motor Vehicle Traffic Accident Air Bag Deployment Injury Severity	General Public

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TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-25

FLEET - PRIVATE VEHICLE
LOCATION - MISSISSIPPI

SUMMARY

This report concerns a motor vehicle crash involving an air bag equipped 1995 Ford Mustang and a 1991 Ford Explorer XL occurring in [redacted] 1996 at 4:18 p.m., in an urban area on a city street. This crash is of special interest because the Mustang's unrestrained, right front passenger (6 year-old male) sustained fatal cervical injuries from his deploying air bag.

The Mustang was traveling west in the westbound lane of a three-lane (i.e., westbound and eastbound through lanes and a bi-directional, left-hand, turn lane), undivided, city street when it impacted the Explorer which was also traveling west in the same, westbound lane of the city street. The crash occurred in the westbound through lane. The Mustang came to rest near were the impact occurred heading west-southwest. The Explorer moved slightly forward (westward) after impact and came to rest, heading west, in the westbound lane of the roadway.

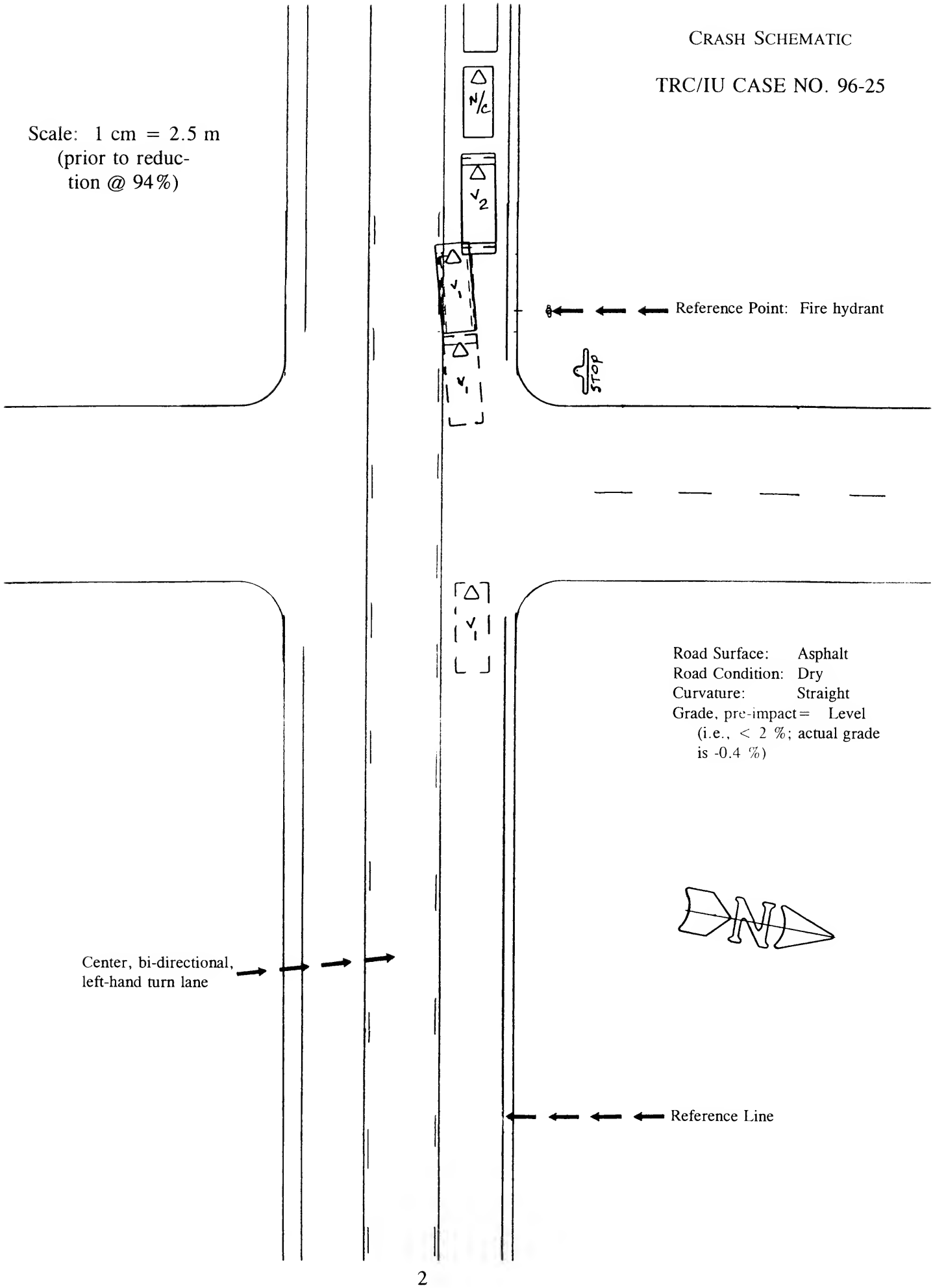
The front right bumper of the Mustang impacted the back left of the Explorer. The Mustang's frontal damage indicates that, other than the direct damage to the top 5 centimeters (2.0 inches) of the front right bumper, the Mustang primarily underrode the back of the Explorer. The Mustang was towed, but not due to damage, and the Explorer was driven from the scene. The CDCs were determined to be: **12-FREW-1** for the Mustang and **06-BLEE-1** for the Explorer. The SMASH reconstruction program, damage only algorithm, was used on the highest severity impact to the Mustang. The Total, Longitudinal, and Lateral Delta Vs are respectively: 6 km.p.h. (4 m.p.h.), -6 km.p.h. (-4 m.p.h.), and 0 km.p.h. (0 m.p.h).

The 1995 Ford Mustang was equipped with both driver and right front passenger supplemental restraint systems (air bags) which deployed as a result of the frontal impact. The driver of the vehicle (29 year-old female) was normally postured, with her seat track located between its middle and forward-most positions, and the tilt steering wheel was located between its middle and down-most positions. She was also restrained by her available, active, three-point, lap and shoulder belt and sustained according to her interview, minor integumentary injuries which included: an abrasion, a contusion, and a laceration to her anterior right forearm. The right front passenger (6 year-old male) was normally postured, with his seat track located between its middle and rearmost positions, and was not wearing his available, active, three-point, lap and shoulder belt. He sustained, according to his medical records, fatal cervical and undetermined internal injuries which included: an undetermined cervical fracture (i.e., broken neck). In addition, he sustained abrasions to his right face and anterior neck and contusions to his anterior neck, left chest, and right shoulder and/or bilateral axillary areas. The cervical and integumentary injuries were caused by his deploying air bag. The existence of the internal injuries was not substantiated. In fact, no autopsy was performed to confirm any of the physician diagnoses. The right rear passenger (9 year-old male) was normally postured. The rear split bench seat is not adjustable, and he was also restrained by his available, active, three-point, lap and shoulder belt. According to the interview with the Mustang's driver (i.e., mother), he did not sustain any injuries as a result of this crash.

CRASH SCHEMATIC

TRC/IU CASE NO. 96-25

Scale: 1 cm = 2.5 m
(prior to reduction @ 94%)



TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-25

FLEET - PRIVATE VEHICLE
LOCATION - MISSISSIPPI

ACCIDENT DATA

Location/Street:	City street
State:	Mississippi
Area/Type:	Urban/commercial
Accident Date/Time:	[redacted], 1996, @[redacted] p.m.
Investigating Police Agency:	City police department
Accident Type:	Vehicle / Vehicle - Rear end
Occupant Injury Severity (air bag vehicle):	Cervical fracture, not further specified (AIS-2), and probable a cervical cord injury (Not coded)

AMBIENT CONDITIONS

Light Conditions:	Daylight
Weather Condition:	Clear
Precipitation:	None
Road Surface:	Dry
Temperature:	75 degrees F (24 degrees C) @ nearest metropolitan airport

ROADWAY

	Case Vehicle	**Vehicle #2**
Location:	City street	City street
Number of Travel Lanes:	Three lanes, one west-bound and one eastbound through lane, one bi-directional center left-hand turn lane	Three lanes, one west-bound and one eastbound through lane, one bi-directional center left-hand turn lane
Lane Width:	3.5 meters (11.5 feet)	3.5 meters (11.5 feet)

ROADWAY (CONTINUED)

	Case Vehicle	Vehicle #2
Surface Type:	Bituminous	Bituminous
Median:	None	None
Shoulders:	0.5 meters (1.6 feet), paved	0.5 meters (1.6 feet), paved
Vertical alignment:	Straight	Straight
Horizontal alignment:	Level (i.e., actual grade is -0.4% to the west)	Level (i.e., actual grade is -0.4% to the west)
Estimated Coefficient of Friction:	.70	.70
Traffic Density:	Heavy	Heavy

TRAFFIC CONTROLS

	Case Vehicle	Vehicle #2
Signals:	Vertically mounted on-colors traffic control with left-hand turn signal at intersection ahead	Vertically mounted on-colors traffic control with left-hand turn signal at intersection ahead
Signs:	Guide sign: State route junction	Guide sign: State route junction
Markings:	Solid white edge line; solid and dashed yellow center lines between turn lane and westbound lane	Solid white edge line; solid and dashed yellow center lines between turn lane and westbound lane
Speed Limit:	40 km.p.h. (25 m.p.h.)	40 km.p.h. (25 m.p.h.)

VEHICLES

	Case Vehicle	Vehicle #2
Year:	1995	1991
Make:	Ford	Ford
Model:	Mustang	Explorer XL, 4x2
Body Type:	Two-door coupe, four passengers	Four-door sport utility, five passengers
V.I.N.	1FALP4044SF------	1FMDU32X7MU------

VEHICLES (CONTINUED)

	Case Vehicle	Vehicle #2
Color:	Black	White
Mileage:	78,858 km (49,000 miles)	167,504 km (104,082 miles)
Engine:	3.8 liters, V-6, EFI	4.0 liters, V-6, EFI
Transmission:	Five-speed, manual	Four-speed, automatic with overdrive
Steering:	Power-assisted, rack-and-pinion	Power-assisted, recirculating ball
Brakes:	Power-assisted, front disc, rear drum	Power-assisted, front disc, rear drum
Padding:	Steering wheel and hub, "A"-pillars, sunvisor, dash, and side door surfaces	Steering wheel and hub, "A"-pillars, sunvisors, dash, and side door surfaces
Active Restraints:	Three-point, manual, lap and shoulder belts in front and rear outboard seating positions	Three-point, manual, lap and shoulder belts in front and rear outboard seating positions; lap belt only at rear center position
Passive Restraints:	Factory installed driver and right front passenger supplemental restraint systems (air bags)	Not equipped
Defects:	None	None
Fleet:	Private vehicle	Private vehicle
Tow status:	Towed but not due to damage	Driven away

VEHICLE DAMAGE

EXTERIOR	Case Vehicle	Vehicle #2
Deployment Impact		
Event number:	One	One
Object Struck:	Vehicle #2	Case Vehicle
Damage location Damaged Plane:	Front	Back

VEHICLE DAMAGE (CONTINUED)

EXTERIOR (Continued)	**Case Vehicle**	**Vehicle #2**
Deployment Impact (Continued)		
Vertical Location On Plane:	Bumper and above	Bumper
Direct Begins:	At right bumper corner	At left bumper corner
Length Direct:	44.0 cm (17.3 in)	40.0 cm (15.7 in)
Field L:	58.0 cm (22.8 in)	49.0 cm (19.3 in)
C_1:	0.1 cm (0.0 in)	2.0 cm (0.8 in)
C_2:	0.3 cm (0.1 in)	1.5 cm (0.6 in)
C_3:	0.5 cm (0.2 in)	0.5 cm (0.2 in)
C_4:	0.5 cm (0.2 in)	0.1 cm (0.0 in)
C_5:	Not used	Not used
C_6:	Not used	Not used
D:	+51.0 cm (20.1 in)	-69.0 cm (-27.2 in)
Maximum Crush:	0.5 cm (0.2 in)	2.0 cm (0.8 in)
Location:	C_4	C_1
CDC:	12-FRMW-1 (360)	06-BLEE-1 (+170)
Damaged Components:	Front bumper facia, front grille, hood, and right front headlight assembly	Rear bumper and hatch, left rear quarter panel
INTERIOR		
Damaged Components:	Driver and right front passenger air bag modules and right windshield	None
Other Evidence of Occupant Contact:	Center console, right front passenger sunvisor and roof, right dash above glovebox	None
Manual Restraint System Failures:	None	None
Seat Performance Failures:	None	None
REPAIR		
Cost Estimate:	Unknown	Unknown

VEHICLE VELOCITY ESTIMATES

Highest Delta "V"	**Case Vehicle**	**Vehicle #2**
Reconstruction Program:	SMASH	SMASH

VEHICLE VELOCITY ESTIMATES (CONTINUED)

Highest Delta "V"	Case Vehicle	Vehicle #2
Program Algorithm:	Damage only	Damage only
Barrier Equivalent Speed:	6 km.p.h. (4 m.p.h.)	5 km.p.h. (3 m.p.h.)
Total Delta "V":	6 km.p.h. (4 m.p.h.)	5 km.p.h. (3 m.p.h.)
Longitudinal Delta "V":	-6 km.p.h. (-4 m.p.h.)	+5 km.p.h. (+3 m.p.h.)
Lateral Delta "V":	0 km.p.h. (0 m.p.h.)	-1 km.p.h. (-1 m.p.h.)

NOTE: Due to the minimal deformation to both vehicles and the underride type impact, the actual Delta Vs are higher. This contractor's visually estimated Delta V is between 13 km.p.h. (8 m.p.h.) and 18 km.p.h. (11 m.p.h.).

COLLISION SEQUENCE

The following is based on the Police Accident Report, interviews with both vehicle drivers and the investigating police officer, scene and vehicle inspections, occupant medical records, and this contractor's evaluation of the evidence.

PRE-CRASH: The case vehicle (Mustang) was traveling west in the westbound lane of a three-lane (i.e., westbound and eastbound through lanes and a bi-directional, left-hand turn lane), undivided, city street and was intending to continue in its direction of travel. Vehicle #2 (Explorer) was also traveling west in the same, westbound lane of the city street and was stopped waiting for the traffic control signal ahead to change. The driver of the case vehicle braked and steered to her left leaving approximately 4.0 meters (13 feet) of skidmarks. Despite her avoidance maneuvers, the case vehicle continued essentially straight ahead prior to impact. The driver of vehicle #2 made no pre-crash avoidance maneuvers. Vehicle #2 remained stopped, heading westward, prior to impact. The crash occurred in the westbound through lane.

CRASH: The front right bumper of the case vehicle impacted the back left of vehicle #2 causing both the driver and right front passenger side supplemental restraint systems (air bags) to deploy. The case vehicle's frontal damage indicates that, other than the direct damage to the top 5 centimeters (2.0 inches) of the front right bumper, the case vehicle primarily underrode the back of vehicle #2. The vehicle came to rest near were the impact occurred heading west-southwest. Vehicle two moved slightly forward (westward) after impact and came to rest, heading west, in the westbound lane of the roadway.

POST-CRASH:

Occupants: All three occupants remained inside the case vehicle at final rest. The driver and right rear passenger were conscious and able to exit the case vehicle without assistance. The right front passenger was unconscious and was removed from the case vehicle by emergency medical personnel. The case vehicle's driver and right

COLLISION SEQUENCE (CONTINUED)

POST-CRASH:

Occupants: (Continued)

rear passenger were restrained by their available, active, three-point, lap and shoulder belts. According to the case vehicle's driver, the right front passenger was also restrained by his available, active, three-point, lap and shoulder belts; however, based on police evidence (i.e., police took hair and skin[1] from the windshield), the vehicle inspection[2], and the interviews with Vehicle #2's driver[3] and the coroner/funeral director (i.e., the coroner viewed the right front passenger's torso and saw no evidence of seatbelt pattern bruising), the right front passenger was not using his safety belts.

Police: The investigating police agency was notified of the crash within one minute post-crash and arrived on-scene three minutes later. Traffic control procedures were established and emergency medical and towing services were called to assist.

Rescue: The case vehicle's driver and the right rear passenger (i.e., older son) did not require medical treatment. The right front passenger was transported by ambulance to a medical facility where he was pronounced dead thirty-two minutes post-crash. The driver accompanied the right front passenger (i.e., younger son) in the ambulance to the medical facility. The right rear passenger was transported from the scene by his grandfather. The case vehicle's driver sustained minor integumentary injuries (i.e., an abrasion, a contusion, and a laceration to her anterior right forearm) as a result of the crash, and the right rear passenger was not injured. The right front passenger sustained fatal cervical and undetermined internal injuries. Based on this occupant's medical records, the cervical injuries included an undetermined cervical fracture (i.e., broken neck[4]). In addition, he sustained abrasions to his right face and anterior neck and contusions to his anterior neck, left chest, and right shoulder and/or bilateral axillary areas. The cervical and integumentary injuries were caused by his deploying air bag. The existence of the internal injuries was not substantiated. In fact, no autopsy was performed to confirm any of the physician diagnoses.

Removal: Following the police investigation, the case vehicle was towed from the scene but not because of damage. Vehicle #2 was driven from the scene.

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[1] This contractor believes that there was definitely hair in the cracked windshield, but the alleged skin may in fact have been residue of the air bag generant; see **SELECTED PHOTOGRAPH #44**.

[2] Given the significant blood stains on the right front passenger's seat and the right side of the center console (see **SELECTED PHOTOGRAPHS #57** and **#58**), it is noteworthy that there was no blood present on the seatbelt (see **SELECTED PHOTOGRAPH #65**).

[3] Vehicle #2's driver indicated that he saw the right front passenger strike the windshield during crash.

[4] Based on this contractor's reading of the medical records and our previous experience with child, air bag-related, cervical injuries, this contractor strongly suspects that this patient sustained an atlanto-occipital dislocation and/or fracture with resulting trauma (laceration, contusion) to the spinal cord.

HUMAN FACTORS/OCCUPANT DATA

DRIVERS:	**Case Vehicle**	**Vehicle #2**
Age:	29 year-old	39 year-old
Sex:	Female	Male
Height:	152 cm (60 in)	180 cm (71 in)
Weight:	59 kg (130 lbs)	118 kg (260 lbs)
Occupation:	Student	Government official (i.e., County Deputy Sheriff)
Active Restraint System/Usage:	Three-point lap and shoulder/Used	Three-point lap and shoulder/Used
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report	Vehicle inspection, interviewee, and Police Accident Report
Passive Restraint System/Usage:	Driver side air bag/air bag deployed	Not equipped
Usage Source:	Vehicle inspection and interviewee	Not applicable
Eyeglasses/contacts:	None	None
Vehicle Familiarity:	One year, approximately 28,968 km (18,000 mi) in last 12 months	Five years, approximately 4,828 km (3,000 miles) in last 12 months
Route Familiarity:	Daily	Daily
Trip Plan:	Shopping to home	Home to shopping
Manner of Leaving Scene:	Accompanied right front occupant in ambulance	Drove away
Type of Medical Treatment:	None	None

CASE VEHICLE PASSENGERS:	**Right Front**	**Right Rear**
Age:	6 year-old	9 year-old
Sex:	Male	Male
Height:	117 cm (46 in)	137 cm (54 in)
Weight:	23 kg (50 lbs)	38 kg (84 lbs)
Active Restraint System/Usage:	Three-point lap and shoulder/Not used	Three-point lap and shoulder/Used

HUMAN FACTORS/OCCUPANT DATA (CONTINUED)

CASE VEHICLE PASSENGERS: (CONTINUED)	Right Front	Right Rear
Usage Source:	Vehicle inspection	Interviewee, vehicle inspection, and Police Accident Report
Passive Restraint System/Usage:	Factory installed air bag/Air bag deployed	Not equipped
Usage Source:	Vehicle inspection and interviewee	Not applicable
Eyeglasses/contacts:	None	Not applicable
Manner of Leaving Scene:	Ambulance	Driven from scene by relative (i.e., grandfather)
Type of Medical Treatment:	Died in Emergency room	None

VEHICLE #2 PASSENGERS:	Right Front	Left Rear
Age:	40 year-old	13 year-old
Sex:	Female	Male
Height:	170 cm (67 in)	175 cm (69 in)
Weight:	76 kg (167 lbs)	77 kg (170 lbs)
Active Restraint System/Usage:	Three-point lap and shoulder/Used	Three-point lap and shoulder/Used
Usage Source:	Vehicle inspection and interviewee	Vehicle inspection, interviewee, and Police Accident Report
Passive Restraint System/Usage:	Not equipped	Not equipped
Usage Source:	Not applicable	Not applicable
Eyeglasses/contacts:	Not applicable	Not applicable
Manner of Leaving Scene:	Driven	Driven
Type of Medical Treatment:	None	None

VEHICLE #2 PASSENGERS: (Continued)	Center Rear	Right Rear
Age:	5 month-old	22 year-old
Sex:	Male	Female

HUMAN FACTORS/OCCUPANT DATA (CONTINUED)

VEHICLE #2 PASSENGERS: (Continued)	Center Rear	Right Rear
Height:	64 cm (25 in)	170 cm (67 in)
Weight:	10 kg (23 lbs)	56 kg (123 lbs)
Active Restraint System/Usage:	Two-point lap belt/Used with **EVENFLO JOYRIDE** child safety seat	Three-point lap and shoulder/Used
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report	Vehicle inspection, interviewee, and Police Accident Report
Passive Restraint System/Usage:	Not equipped	Not equipped
Usage Source:	Not applicable	Not applicable
Eyeglasses/contacts:	Not applicable	Not applicable
Manner of Leaving Scene:	Driven	Driven
Type of Medical Treatment:	None	None

CASE VEHICLE DRIVER INJURIES[5]

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Abrasion anterior right forearm	790202.1,1	7	Air bag, driver's side	{Probable}
Contusion posterior right forearm	790402.1,1	8[5]	Center floor-mounted console	{Certain}
Laceration posterior right forearm	790600.1,1	7	Center floor-mounted console	{Certain}

[5] This injury was observed by this contractor's investigator.

CASE VEHICLE RIGHT FRONT PASSENGER INJURIES[6,7,8,9]

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Cervical fracture[6] {broken neck}	650216.2,6	3	Air bag, passenger's side	{Certain}
Abrasions right face	290202.1,1	8[9]	Air bag, passenger's side	{Certain}
Abrasions anterior neck	390202.1,4	3	Air bag, passenger's side	{Certain}
Contusions, large, neck and entire lower chin area	390402.1,4	3	Air bag, passenger's side	{Certain}
Contusion to left rib area	490402.1,2	3	Air bag, passenger's side	{Certain}
Contusion right clavicular[7] area	790402.1,1	3	Air bag, passenger's side	{Certain}
Contusions bilateral axillary[7] areas	790402.1,3	3	Air bag, passenger's side	{Certain}
Internal injuries[8], not further specified	415099.7,0 515099.7,0	3	Unknown mechanism	{Unknown}

CASE VEHICLE RIGHT REAR PASSENGER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Not injured	0	7	Not applicable	Not applicable

---

[6] The patient was in complete cardiopulmonary arrest on arrival of the emergency medical technicians.

This medical description is the best fit for the non-anatomically clear descriptions that exist on the actual medical records. In addition to the cervical fracture, the consultant physician described palpating a step off sign at the base of the neck. Later he indicated that to his "eyes it appeared that there was a separation of the base of the skull with C_1 ...." However, the radiology report indicated that "there is questionable dislocation of C_1 and the base of the skull." Because of this uncertainty, our injury coding protocol does not allow us to encode the suspected atlanto-occipital dislocation.

Based on this contractor's experience with previous air bag-related cervical injuries, the patient's cervical spinal cord was almost certainly, fatally traumatized.

[7] It is unclear if the contusion reported to the right clavicular area (emergency medical technician and consultant physician) is one and the same as those reported to the axillary areas (nurse notes). The emergency medical technicians also reported contusions (bruising) to {i.e., both} shoulders.

[8] In this contractor's opinion, the existence of internal injuries is highly questionable. This diagnosis appears to rest on the observation that the patient's abdomen was distended (consultant's examination and nurses notes) and that the distention increased during the treatment (nurses notes). However, according to the consultant's exam, no blood was found in the peritoneal cavity (if it was even tapped) and, at one point, he thought the distention was caused by air.

[9] The abrasions to the patient's right face are visible in the photographs taken by the coroner; see **SELECTED PHOTOGRAPHS #89** and **#90**.

VEHICLE #2 DRIVER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Not injured	0	7	Not applicable	Not applicable

VEHICLE #2 RIGHT FRONT PASSENGER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Not injured	0	7	Not applicable	Not applicable

VEHICLE #2 LEFT REAR PASSENGER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Not injured	0	7	Not applicable	Not applicable

VEHICLE #2 CENTER REAR PASSENGER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Not injured	0	7	Not applicable	Not applicable

VEHICLE #2 RIGHT REAR PASSENGER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Not injured	0	7	Not applicable	Not applicable

CASE VEHICLE DRIVER KINEMATICS

According to the case vehicle's driver, immediately prior to the crash she was normally postured (i.e., her seat was slightly reclined with her back against the seatback, her left foot on the floor, her right foot on the brake, and both hands on the steering wheel). According to the case vehicle's driver, her seat track was located between its middle and forward-most positions, and the tilt steering wheel was located between its middle and down-most positions. According to the vehicle inspection, the driver's seatback was located in the upright position, the seat track was located between its middle and rearmost positions and had been moved prior to our vehicle inspection, and the tilt steering wheel was located between its middle and down-most positions. According to the vehicle inspection and the driver's interview, she was also restrained by her

CASE VEHICLE DRIVER KINEMATICS (CONTINUED)

available, active, three-point, lap and shoulder belt. The case vehicle was not equipped with an adjustable "D"-ring mechanism.

According to the scene evidence and the case vehicle's driver, she braked [with lock-up, depositing 4.0 meters (13 feet) of skidmarks] and steered to the left attempting to avoid the crash. As a result of these attempted avoidance maneuvers and the use of her available safety belts, she most likely moved slightly forward, upward, and to her right just prior to impact.

Based on the vehicle inspection and occupant kinematic principles, the case vehicle's primary impact with vehicle #2, not only deployed the driver's side air bag, but thrust the driver forward and upward loading the driver's safety belts (see **SELECTED PHOTOGRAPHS #37** and **#38**) and contacting her deploying driver side air bag. An inspection of the driver's air bag revealed a black smear to the upper center portion which had the appearance of eye make-up; see **SELECTED PHOTOGRAPH #30**. There was no evidence of contact on the driver side air bag module's cover flap. During the deployment, the driver's right arm was thrown back and to the right were it contacted the soft drink can that was in the cup/can holder located in the floor-mounted center console. The deploying air bag abraded her right forearm {most likely on the anterior surface} and the contact with the open can and center console caused a contusion and laceration to her posterior right forearm which was shaped like a half moon. The laceration also deposited blood drops around the center console on the driver's side; see **SELECTED PHOTOGRAPHS #35** and **#36**. According to the case vehicle's driver, the laceration to her right forearm occurred when she went to reach for the right front passenger's (i.e., younger sons) seatbelt in order to unbuckle it. Based on this driver's lack of serious injuries and considering her short stature [152 centimeters (60 inches)], it appears her safety belt and driver side air bag properly prevented her from an serious injuries.

Based on occupant kinematic principles, at final rest, after loading her safety belts and contacting her deploying air bag, the driver moved backwards toward her original seating position. According to the case vehicle's driver, at final rest she could not recall her exact seating position since her thoughts dealt with getting her kids out of the car because she saw what she believed to be a lot of smoke in the vehicle's interior. This contractor believes that at final rest the driver was close to her original pre-crash seating position.

CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS

According to the case vehicle's driver (i.e., mother), immediately prior to the crash the right front passenger was normally postured (i.e., his seat was slightly reclined with his back against the seatback and his feet hanging down). The driver was unable to recall how her son's arms and hands were positioned. According to the case vehicle's driver, the right front passenger's seat track was located between its middle and rearmost positions. According to the vehicle inspection, the right front passenger's seat track was located two notches from (i.e., almost at) the rearmost position which the driver may have assumed was between its middle and rearmost positions. Based on the vehicle inspection and evidence (i.e., hair) collected from the starred windshield by the police (see **SELECTED PHOTOGRAPH #44**), he was not wearing his available, active, three-point, lap and shoulder belt. It should be noted that the police also collected what they believed to be skin from the windshield along with the hair, but this contractor believes the

CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS (CONTINUED)

alleged skin was air bag exhaust particles (see **SELECTED PHOTOGRAPH #43**) which was sprayed on the windshield through the vent hole. The right front passenger's seatbelt showed only a storage mark on the webbing and no evidence of loading or blood spots; see **SELECTED PHOTOGRAPHS #61** through **#67**. According to the coroner\funeral home director, the right front passenger had no seatbelt patterned markings on his torso. The vehicle was not equipped with an adjustable "D"-ring mechanism.

As a result of the case vehicle's attempted avoidance maneuvers (i.e., braking and steering to the left) and the nonuse of his available safety belts, the right front passenger most likely moved slightly forward and to his right just prior to impact.

Based on the vehicle inspection and occupant kinematic principles, the case vehicle's primary impact with vehicle #2, not only deployed the top-mounted, right front passenger side air bag, but thrust the right front passenger forward and slightly upward where he contacted the deploying air bag which pushed him further upward into the windshield and sunvisor and backwards against the roof (see **SELECTED PHOTOGRAPHS #46** through **#49**) to just above the right front passenger's seatback. An inspection of the right front passenger's air bag revealed evidence (i.e., skin and oil smears) on the top part of the air bag near the cover flap extending to the front portion of the air bag near its top (see **SELECTED PHOTOGRAPHS #50** through **#54**). In addition, there did not appear to be any evidence of contact on the right front passenger side air bag module's top cover flap. According to the driver of vehicle #2, immediately prior to the crash, during the case vehicle's avoidance braking, he saw the right front passenger strike the windshield prior to the air bag deploying. The lack of evidence on the top cover flap would discount this scenario. Based on previous Special Crash Investigation cases, the contact to the windshield by the right front passenger was caused by the air bag inflating while the passenger was moving over the top of it, lifting the passenger into the windshield.

Based on the case vehicle's driver, at final rest the right front passenger was sitting in his seat leaning to his left with his head turned to the left. According to vehicle #2's driver, when he went to the case vehicle this passenger was laying on his left side with his head over the center console, and the air bag was draped over his face. Vehicle #2's driver stated that he was not looking for it, but he did not notice the child's seat belt being "**on**", either. Based on the previous two statements, this contractor believes that at final rest the child was laying to his left with his head on the center console, and following the crash, he was moved to a near upright position, explaining the large amount of blood on the right front passenger's seatback near the base of the seat; see **SELECTED PHOTOGRAPH #57**.

CASE VEHICLE RIGHT REAR PASSENGER KINEMATICS

According to the case vehicle's driver (i.e., mother), immediately prior to the crash the right rear passenger was normally postured (i.e., seated upright with his back against the seatback and his feet hanging down). The driver did not know how his arms and hands were positioned. The rear split bench seat is not adjustable (i.e., no seat track) and has folding backs which cannot be reclined. According to the Police Accident Report and the case vehicle's driver, the right rear occupant was restrained by his available, active, three-point, lap and shoulder belt. This contractor could find no evidence to prove or disprove the occupants belt usage; although, no

CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS (CONTINUED)

contacts were found to the rear of the right front passenger's seatback (see **SELECTED PHOTOGRAPH #69**), and he did not sustain any injuries or received any treatment.

As a result of the case vehicle's attempted avoidance maneuvers (i.e., braking and steering to the left) and the use of his available safety belts, the right front passenger most likely leaned slightly forward and to his right just prior to impact.

Based on the vehicle inspection and occupant kinematic principles, the case vehicle's primary impact with vehicle #2 caused the right rear passenger to move forward and slightly rightward loading his safety belts. Because of the minor impact along was the right rear passenger's restraint usage, he was held back from contacting the right front passenger's seatback.

At final rest, the right rear occupant remained in his seat most likely in his original seating position.

CASE VEHICLE AIR BAG SYSTEM

	DRIVER AIR BAG	PASSENGER AIR BAG
Air Bag Diameter (seam-to-seam, deflated):	Width: 62 cm (24.4 in) Height: 60 cm (23.6 in)	Width: 63 cm (24.8 in) Height: 58 cm (22.8 in)
Number of Vent Holes:	Two	One
Vent Hole Diameter:	2 cm (0.8 in)	5 cm (2.0 in)
Vent Hole Clock Positions:	Approximately eleven-thirty and twelve-thirty o'clock	Approximately 10 o'clock
Number of Air Bag Tethers:	Two: 8 cm (3.0 in) wide	None
Number of Air Bag Module Cover Flaps:	Two	Two
Upper Cover Flap Dimensions:	Width: 15 cm (5.9 in) Height: 8 cm (3.1 in)	Width: 44 cm (17.3 in) Height: 8 cm (3.1 in)
Lower Cover Flap Dimensions:	Width: 14 cm (5.5 in) Height: 5 cm (2.0 in)	Width: 49 cm (19.3 in) Height: 8 cm (3.1 in)
Distance between Dash and leading (i.e., closest) edge of Module's Cover Flap:	**Not applicable**	8 cm (3.1 in)

CASE VEHICLE AIR BAG SYSTEM[11] (CONTINUED)

	DRIVER AIR BAG	PASSENGER AIR BAG
Type of Mount:	Steering column hub	Top mounted
Generant Residue:	Excess[11] found on driver side sunvisor	Excess[11] found on windshield

[11] See **SELECTED PHOTOGRAPHS #33, #34, and #43.**

Appendix A:

SMASH PROGRAM RESULTS

(Damage Only Algorithm

-- including

Barrier Equivalent Speeds)

U.S. Department of Transportation
National Highway Traffic Safety Administration

SMASH PROGRAM SUMMARY

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Identifying Title

10	9625	01	__/__/__
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run

GENERAL INFORMATION

	VEHICLE 1	VEHICLE 2
NASS Vehicle Number	01	02
Year	1995	1991
Make	FORD	FORD
Model	MUSTANG	EXPLORER XL
Body Style	02	4U
CDC	12FREW1	06BLEE1
PDOF	±000°	@170°
Heading Angle	±255°	±260°

VEHICLE SPECIFICATIONS

	VEHICLE 1	VEHICLE 2
Wheelbase	257 cm	284 cm
Overall Length	461 cm	468 cm
Overall Width	182 cm	178 cm
Weight	1396 + 120 + 11 = 1527 kg	1735 + 337 + 5 = 2077 kg
	Curb / Occupant(s) / Cargo	Curb / Occupant(s) / Cargo
Engine Displacement	3.8 L	4.0 L
Drive System	RWD	RWD
Size	2	4
Stiffness	2	7

DAMAGE INFORMATION

	VEHICLE 1	VEHICLE 2
Damage Known?	Y	Y
Damage Length	58 cm	049 cm
Damage Offset	⊕51 cm	⊕69 cm
Crush Depth: C1	0 cm	2 cm
C2	0.25 cm	1.5 cm
C3	0.5 cm	0.5 cm
C4	0.5 cm	0.1 cm
C5	cm	0 cm
C6	cm	0 cm

HS Form 435D (1/96)

SCENE INFORMATION

Rest and Impact Positions [ ] No [ ] Yes

	VEHICLE 1		VEHICLE 2	
Rest Position	X	___ ___ ___ . ___ m	X	___ ___ ___ . ___ m
	Y	___ ___ ___ . ___ m	Y	___ ___ ___ . ___ m
	Heading Angle	___ ___ ___ °	Heading Angle	___ ___ ___ °
Impact Position	X	___ ___ ___ . ___ m	X	___ ___ ___ . ___ m
	Y	___ ___ ___ . ___ m	Y	___ ___ ___ . ___ m
	Heading Angle	___ ___ ___ °	Heading Angle	___ ___ ___ °
Slip Angle (-180 to +180)		___ ___ ___ °		___ ___ ___ °

VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

VEHICLE 1

Vehicle Rotation [ ] No [ ] Yes

Rotation Stop Before Rest [ ] No [ ] Yes

End of Rotation Position X ___ ___ ___ . ___ m

Y ___ ___ ___ . ___ m

Heading Angle ___ °

Curved Path [ ] No [ ] Yes

Point on Path X . m Y . m

Rotation Direction [ ] None [ ] CW [ ] CCW

Rotation >360° [ ] No [ ] Yes

Sustained Contact [ ] No [ ] Yes

VEHICLE 2

Vehicle Rotation [ ] No [ ] Yes

Rotation Stop Before Rest [ ] No [ ] Yes

End of Rotation Position X ___ ___ ___ . ___ m

Y ___ ___ ___ . ___ m

Heading Angle ___ °

Curved Path [ ] No [ ] Yes

Point on Path X . m Y . m

Rotation Direction [ ] None [ ] CW [ ] CCW

Rotation >360° [ ] No [ ] Yes

FRICTION INFORMATION

Coefficient of Friction . ___ ___

Rolling Resistance Option 1

Vehicle 1 Rolling Resistance		Vehicle 2 Rolling Resistance	
LF	___ . ___ ___	LF	___ . ___ ___
RF	___ . ___ ___	RF	___ . ___ ___
LR	___ . ___ ___	LR	___ . ___ ___
RR	___ . ___ ___	RR	___ . ___ ___

IF THIS COMMON IMPACT WAS WITH A CDS VEHICLE *NOT IN TRANSPORT*, FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate damage sketch and dimensions to the form

[redacted] 1997

Summary of Results Using Damage

Special Crash Investigation, TRC/IU 96-25, Task 0067

	Speed Change (Damage)
Vehicle #1	
Total	6 km/h (4 mph)
Longitudinal	-6 km/h (-4 mph)
Latitudinal	0 km/h (0 mph)
PDOF Angle	0 °
Energy Dissipated	= 2884 Joules (2127 Ft-Lb)
Barrier Equivalent Speed	= 6.4 km/h (4.0 mph)
Calculated using crush coefficients entered by the user.	
Vehicle #2	
Total	5 km/h (3 mph)
Longitudinal	5 km/h (3 mph)
Latitudinal	-1 km/h (-1 mph)
PDOF Angle	170 °
Energy Dissipated	= 2791 Joules (2058 Ft-Lb)
Barrier Equivalent Speed	= 4.6 km/h (2.8 mph)
Calculated using crush coefficients entered by the user.	

General Information

	Vehicle #1	Vehicle #2
Year	1995	1991
Make	Ford	Ford
Model	Mustang	Explorer
CDC	12FREW1	06BLEE1
Side Damaged	F	B
PDOF Angle	0 °	170 °
Heading Angle	255 °	260 °
Calculation method:	Vehicle's Crush Coeff.	Vehicle's Crush Coeff.
d0 crush coeff.	97.06 sqrt(N)	98.69 sqrt(N)
d1 crush coeff.	7.22 sqrt(N)/cm	7.79 sqrt(N)/cm

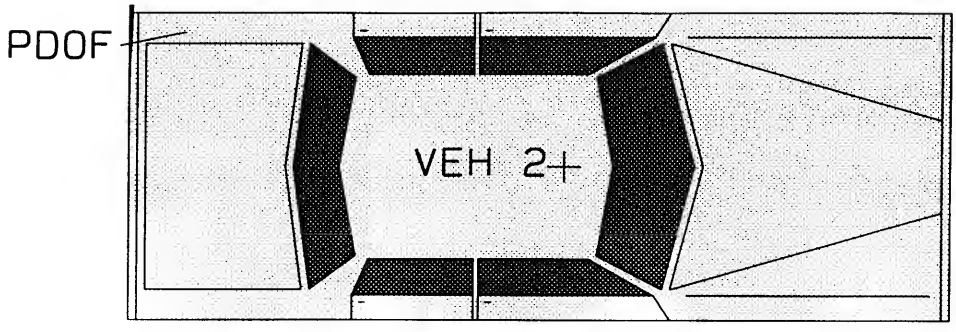
Damage Information

	Vehicle #1	Vehicle #2
Vehicle Damage Known	Yes	Yes
Crush Length	58.0 cm (23 in)	49.0 cm (19 in)
C1	0.1 cm (0 in)	2.0 cm (1 in)
C2	0.3 cm (0 in)	1.5 cm (1 in)
C3	0.5 cm (0 in)	0.5 cm (0 in)
C4	0.5 cm (0 in)	0.1 cm (0 in)
C5	0.0 cm (0 in)	0.0 cm (0 in)
C6	0.0 cm (0 in)	0.0 cm (0 in)
D	51.0 cm (20 in)	-68.9 cm (-27 in)
D'	56.9 cm (22 in)	-77.5 cm (-31 in)

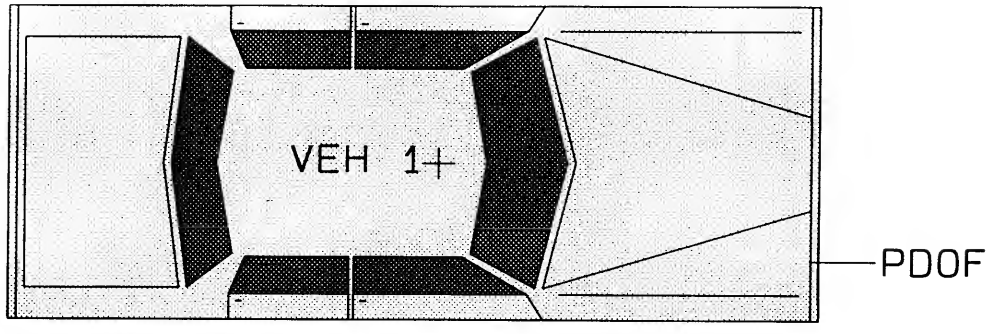
Vehicle Dimensions

	Vehicle #1	Vehicle #2
Length	460.9 cm (181 in)	468.0 cm (184 in)
Width	182.3 cm (72 in)	178.0 cm (70 in)
Wheelbase	257.2 cm (101 in)	284.0 cm (112 in)
Weight	1527 kgs (3366 lbs)	2077 kgs (4579 lbs)
CG to Front of Veh	211.6 cm (83 in)	251.0 cm (99 in)
Engine Displacement	3.8 liters	4.0 liters
Moment of Inertia	293183 kgs (25950 lbs)	410986 kgs (36377 lbs)
Vehicle Mass	1527 kgs (8.8 lb-s^2/in)	2077 kgs (11.9 lb-s^2/in)

1991 Ford Explorer



1995 Ford Mustang



Special Crash Investigation, TRC/IU 96-25, Task 0067
[redacted]
1997

Appendix B:

SELECTED PHOTOGRAPHS

A total of ninety color copies of photographs are presented and referenced as Photograph **#01** through Photograph **#90**. Photographs numbered **#04**, **#06** through **#08**, **#12**, and **#59** were taken and made available by the applicable city, Mississippi, police department. Photographs numbered **#89** and **#90** were taken and made available by the applicable county coroner's office. The remainder of these photographs were taken by the Transportation Research Center.

01: Case vehicle's westward travel path approximately 40 meters (131 feet) from impact with Vehicle #2

02: Case vehicle's westward travel path approximately 20 meters (66 feet) from impact with vehicle #2

On-Site Scene View of Crash Involving a 1995 Ford Mustang (Case Vehicle) and a 1991 Ford Explorer XL (Vehicle #2)

03: Case Vehicle's westward travel path approximately 10 meters (33 feet) from impact with vehicle #2

04: On-scene view of Case Vehicle's westward travel path approximately 3 meters (10 feet) from impact; NOTE: left front skidmark starts near road reflector

05: Close-up of Case Vehicle's left front skidmark crossing solid yellow lane center-line

06: On-scene westward view of Case Vehicle's front skidmarks; NOTE: officer marks approximate point of maximum engagement

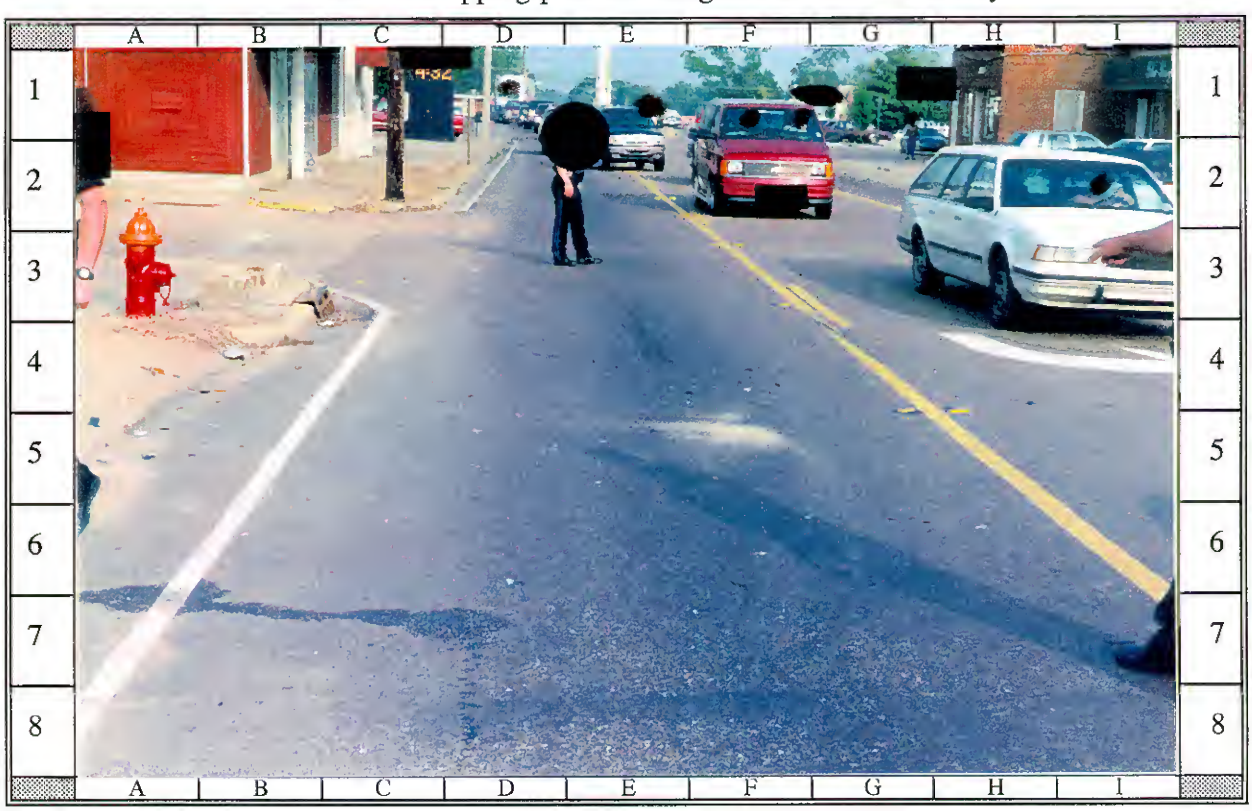
07: On-scene eastward view of skidmarks deposited by Case Vehicle's front tires prior to impact; NOTE: office marks approximate point of maximum engagement

08: On-scene close-up view looking east at right front skidmark deposited by Case Vehicle prior to impact with Vehicle #2

09: Eastward view of Case Vehicle's westward travel path west of impact; NOTE: Case Vehicle's left front tire mark (cells F6--F7)

10: Vehicle #2's westward travel path approximately 45 meters (148 feet) from impact with Case Vehicle

11: Vehicle #2's westward travel path approximately 5 meters (16 feet) from impact; NOTE: Vehicle #2 stopping prior to being struck from behind by Case Vehicle



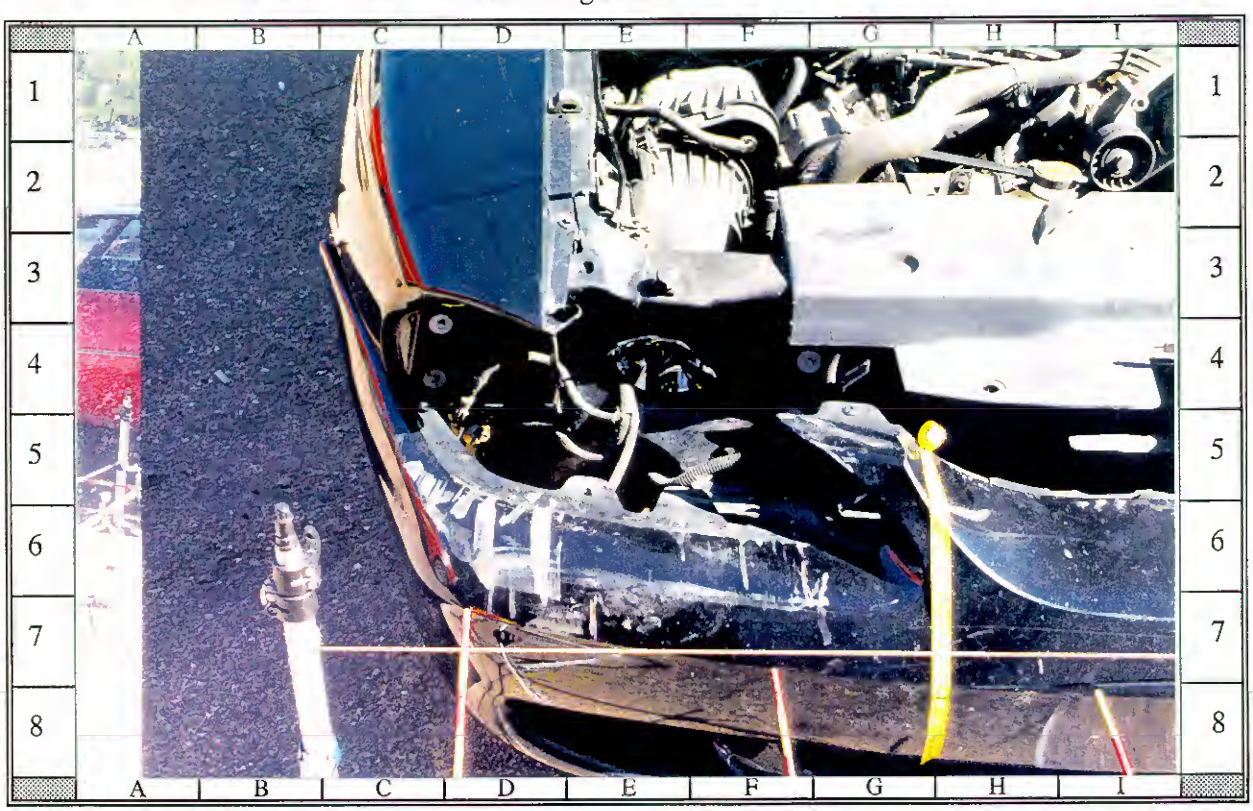
12: On-scene eastward view of Vehicle #2's westward travel path from west of impact; NOTE: Vehicle #2 sustained damage to its back left

13: Case Vehicle's damaged front without contour gauge present; NOTE: direct damage primarily above bumper to right headlight area

14: Case Vehicle's damaged front with contour gauge present; NOTE: damage left of vertical yellow tape and starred right front windshield (passenger side)

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

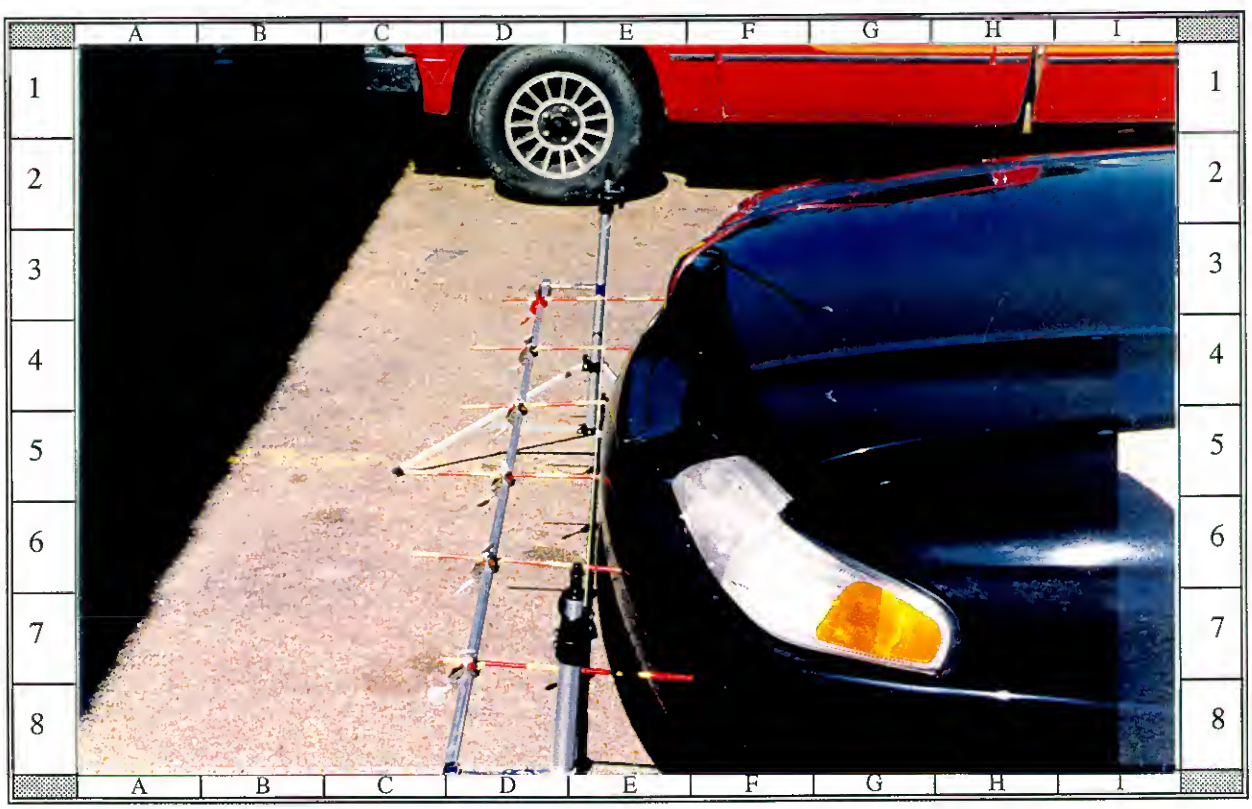
15: Close-up of Case Vehicle's direct frontal damage at bumper level; NOTE: leftward shift to hood and starred right front windshield



16: Overhead close-up of direct damage to Case Vehicle's front right with hood raised

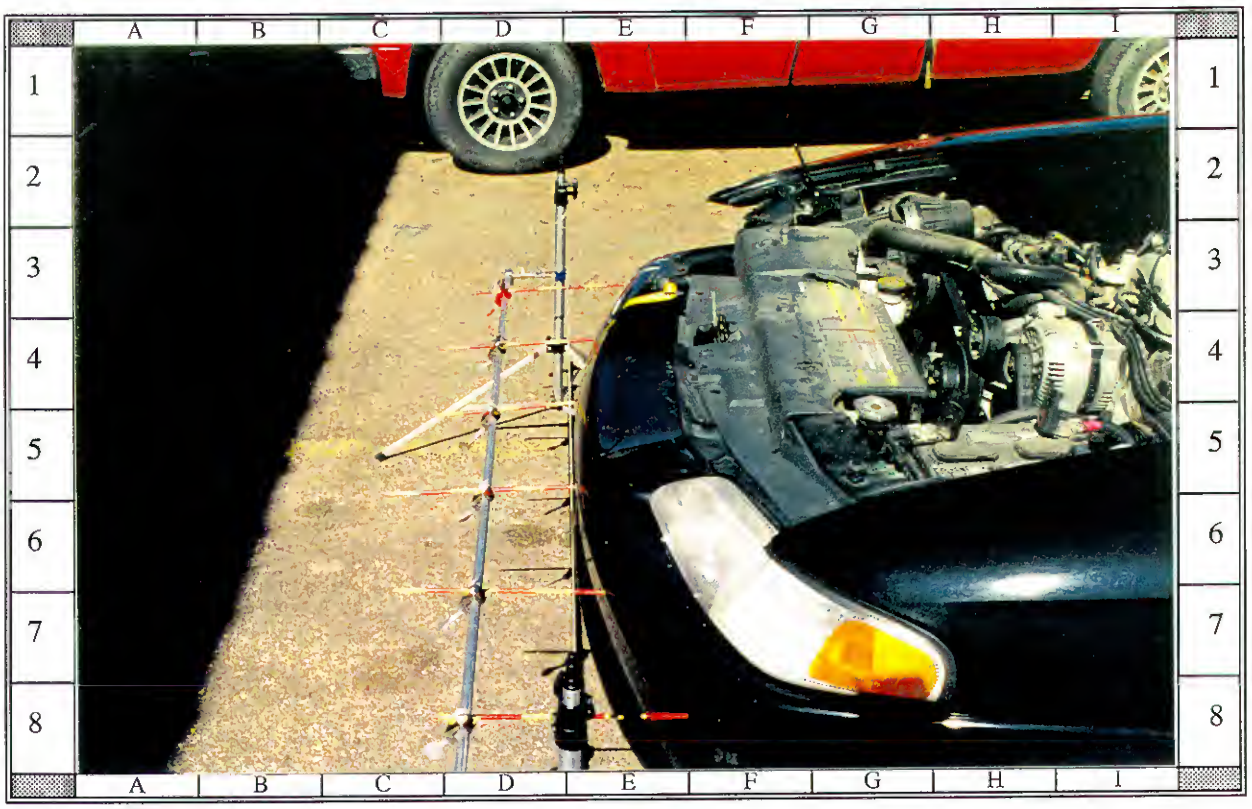
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

17: Case Vehicle's damaged front viewed from approximately 20 degrees left of front



18: Reference line view of Case Vehicle's damaged front from left with hood down

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



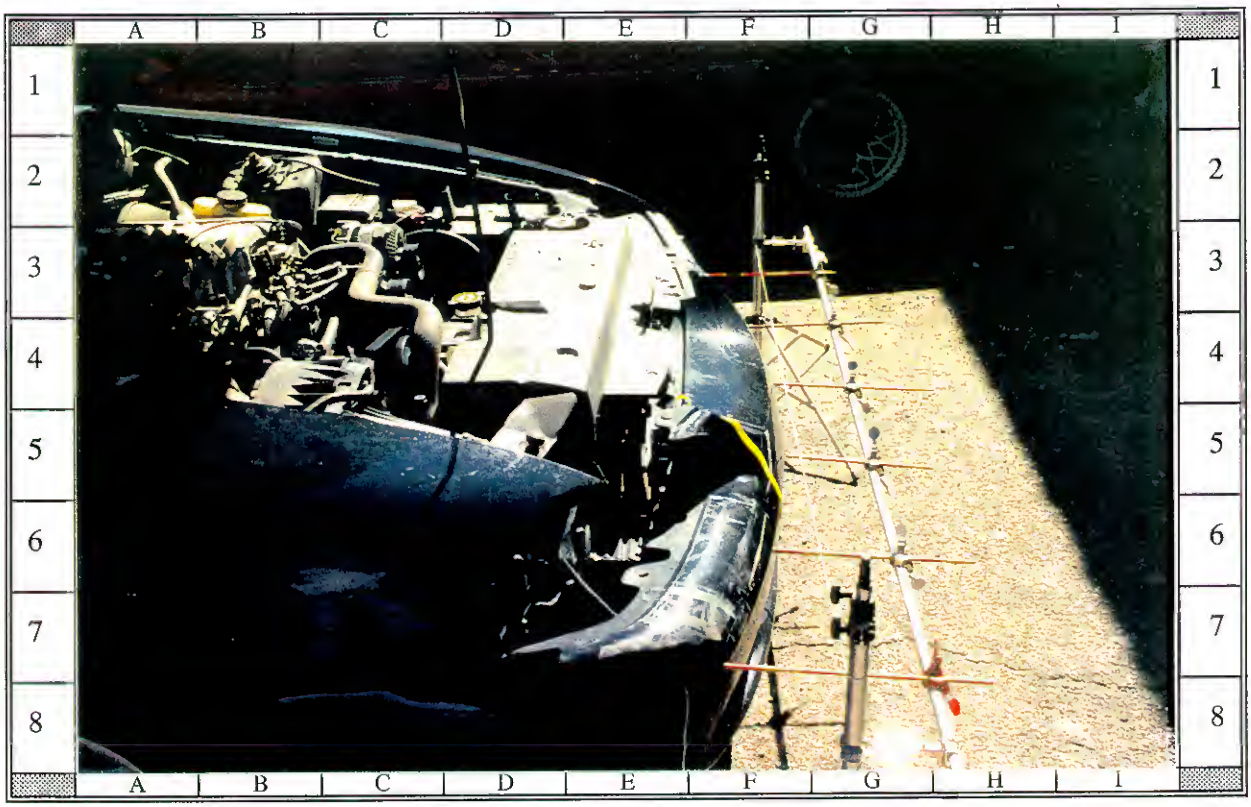
19: Reference line view of Case Vehicle's damaged front from left with hood raised

20: Case Vehicle's undamaged left side and back viewed from approximately 45 degrees left of back

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

21: Case Vehicle's undamaged right side and back viewed from approximately 45 degrees right of back

22: Reference line view of Case Vehicle's damaged front from right with hood down

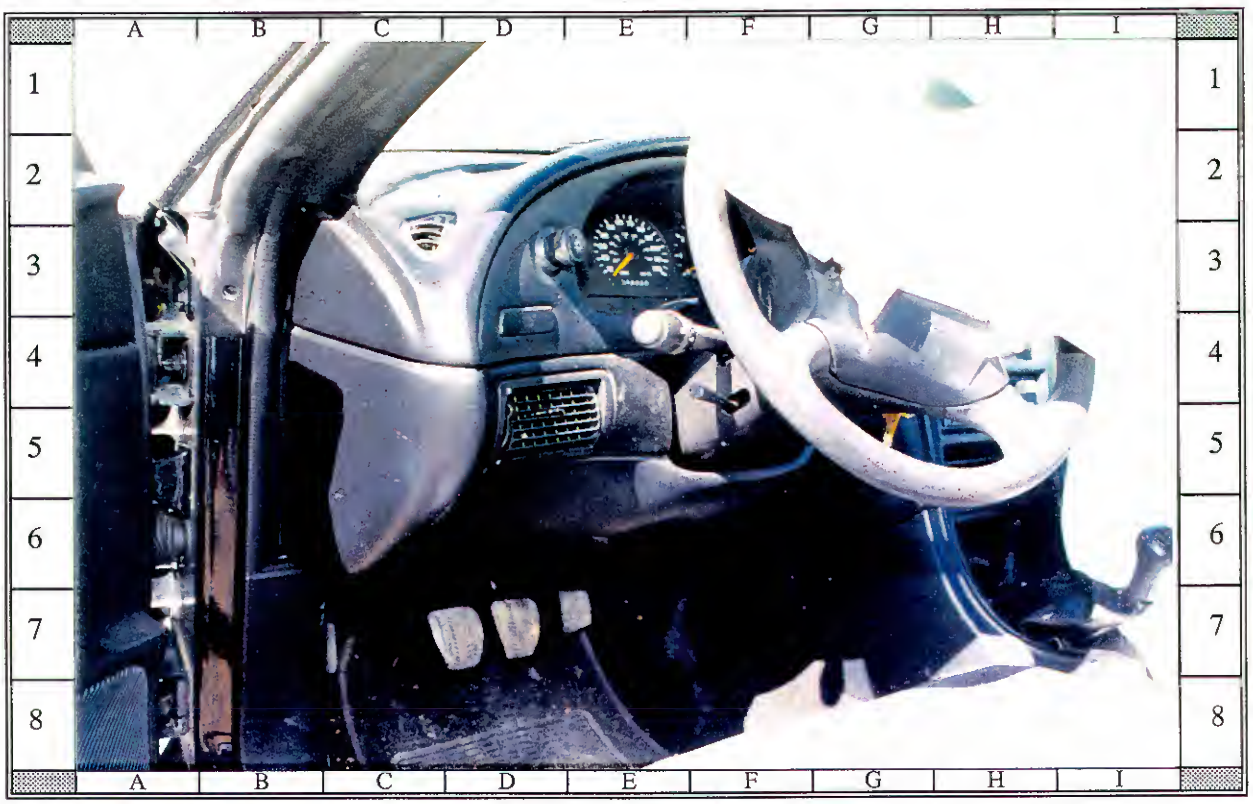


23: Reference line view of Case Vehicle's damaged front from right with hood raised

24: Case Vehicle's damaged front viewed from approximately 45 degrees right of front; NOTE: induced damage to right front fender near right front door

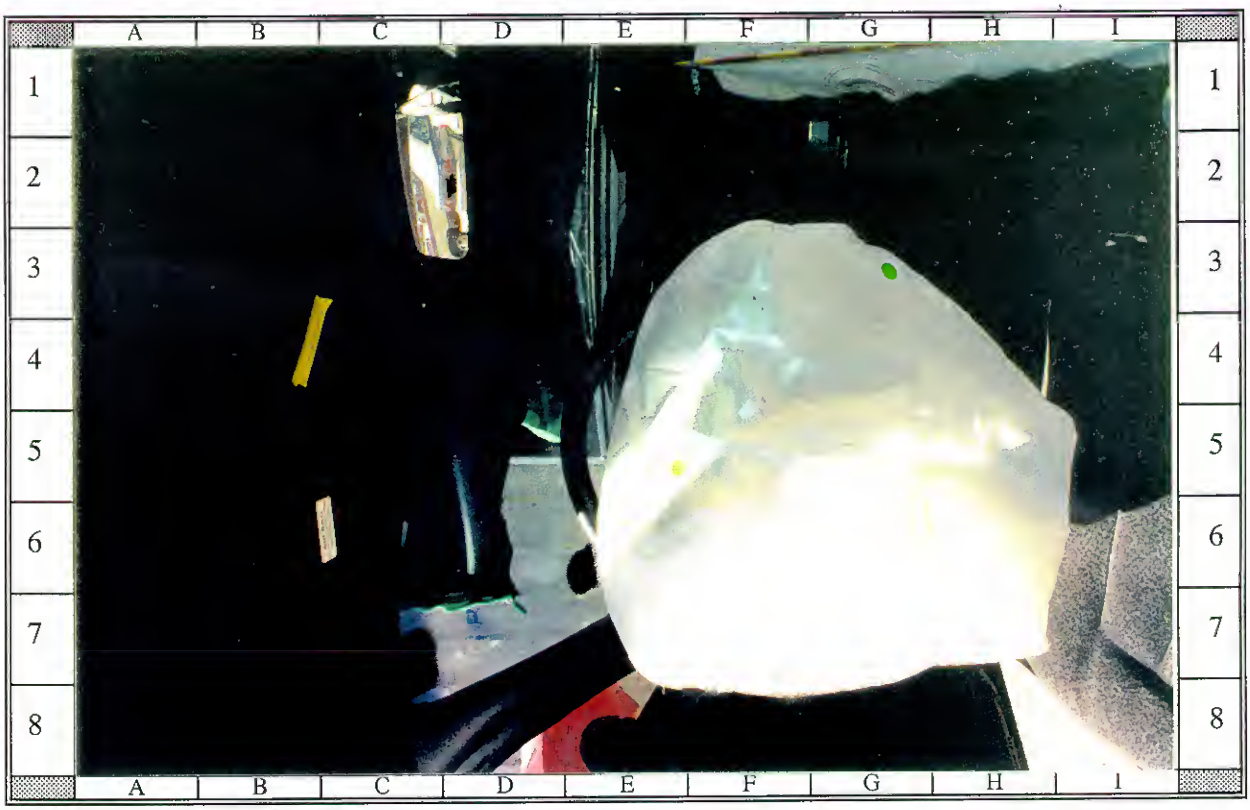
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

25: Case Vehicle's front seating area showing interior surface of driver's door panel and deployed driver and passenger side air bags



26: Case Vehicle's steering column, lower steering wheel rim, dash, and foot controls showing no evidence of contact to knee bolster or rim loading

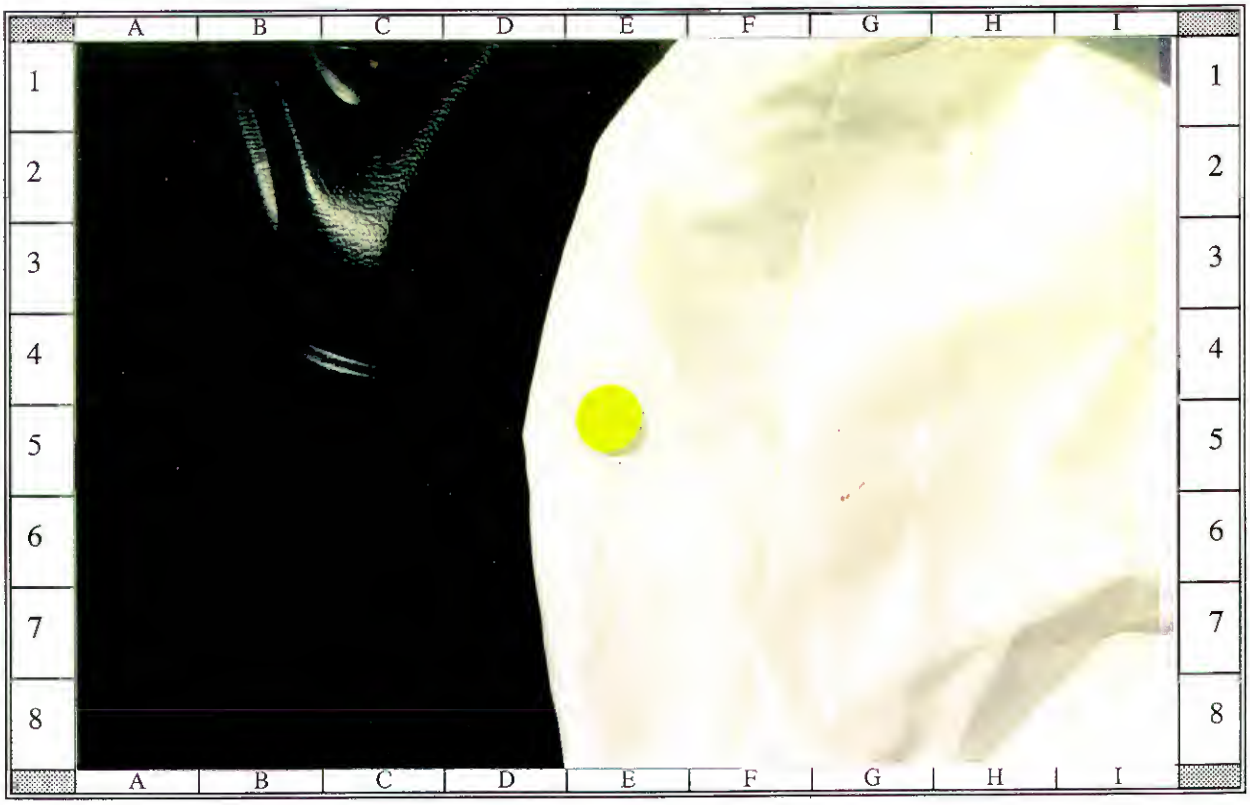
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



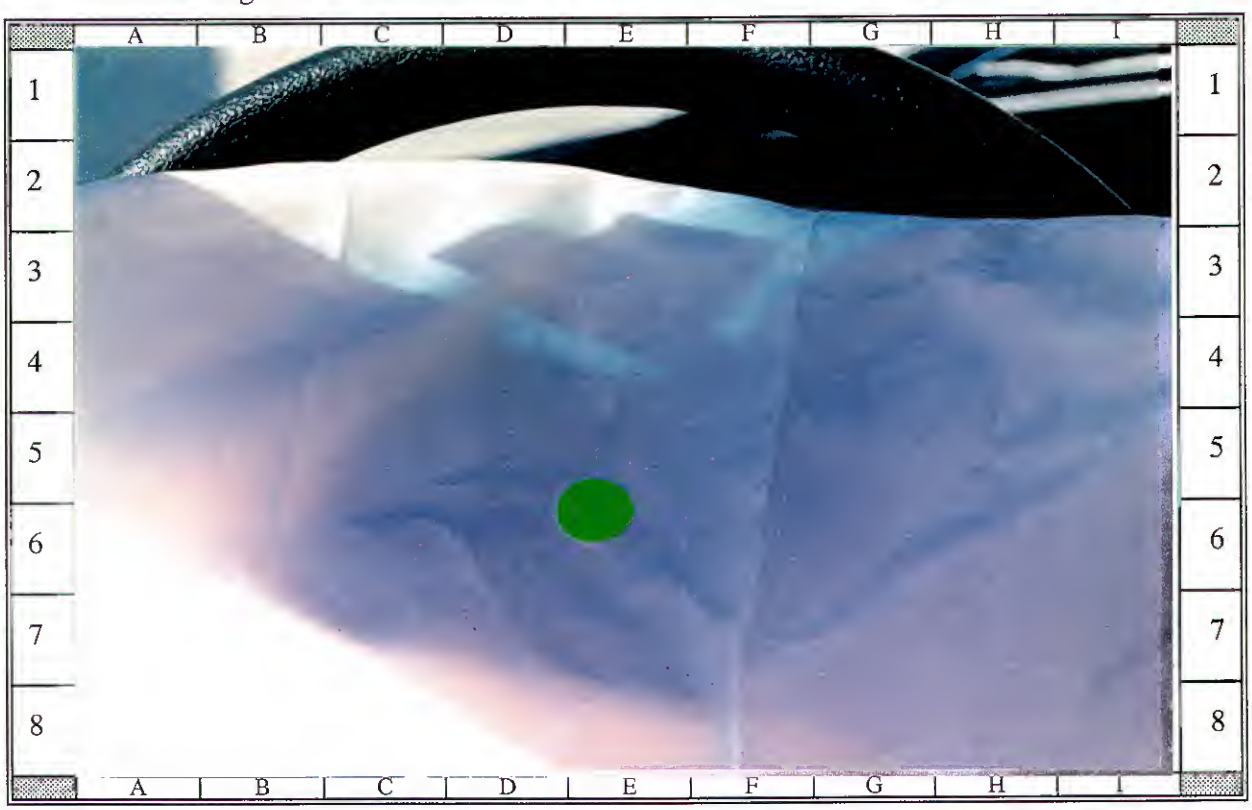
27: Vertical view of contact evidence to Case Vehicle's driver side air bag (green dots) and sunvisor (yellow tape)

28: Close-up of contact evidence (make-up transfers and mucous--green dots) to upper half of Case Vehicle's driver side air bag; see cells B4, E2, and H5

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

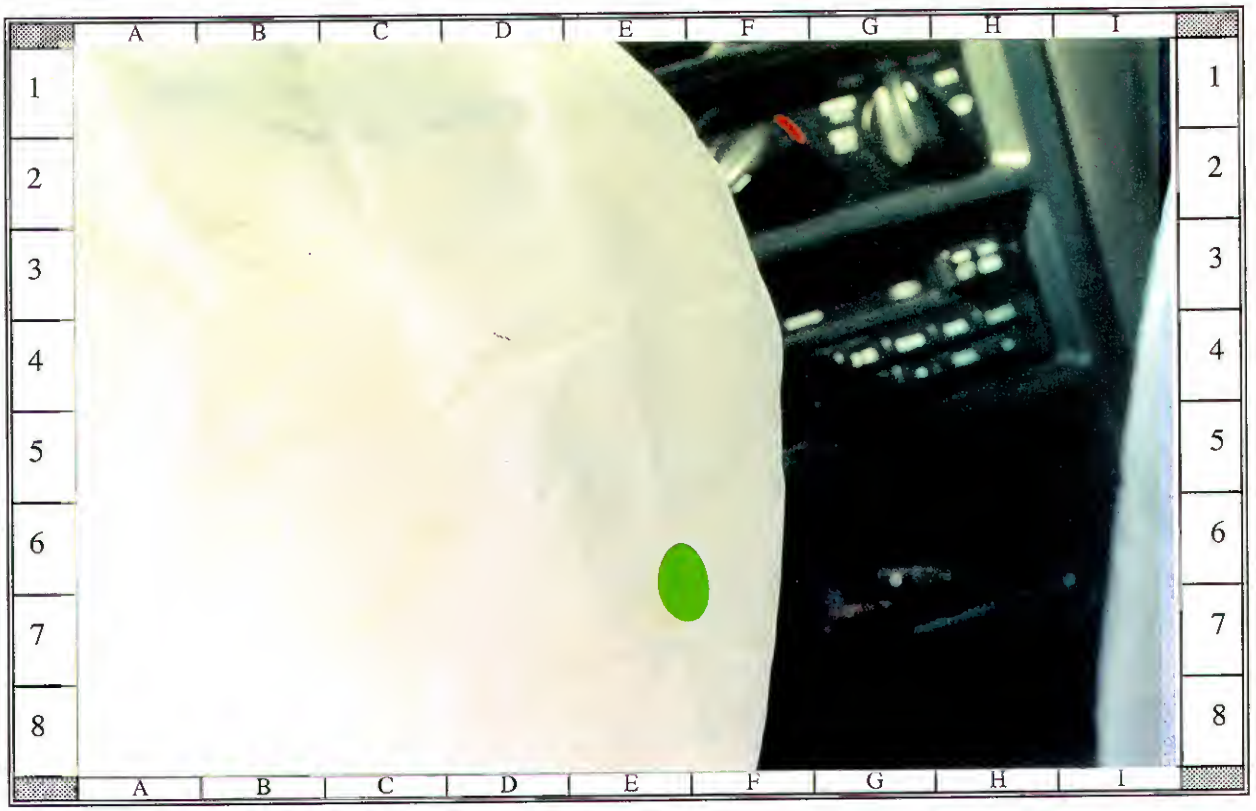


29: Closer-up view of mucous smear to middle left side of Case Vehicle's driver side air bag



30: Closer-up view of eye make-up smear to top center portion of Case Vehicle's driver side air bag

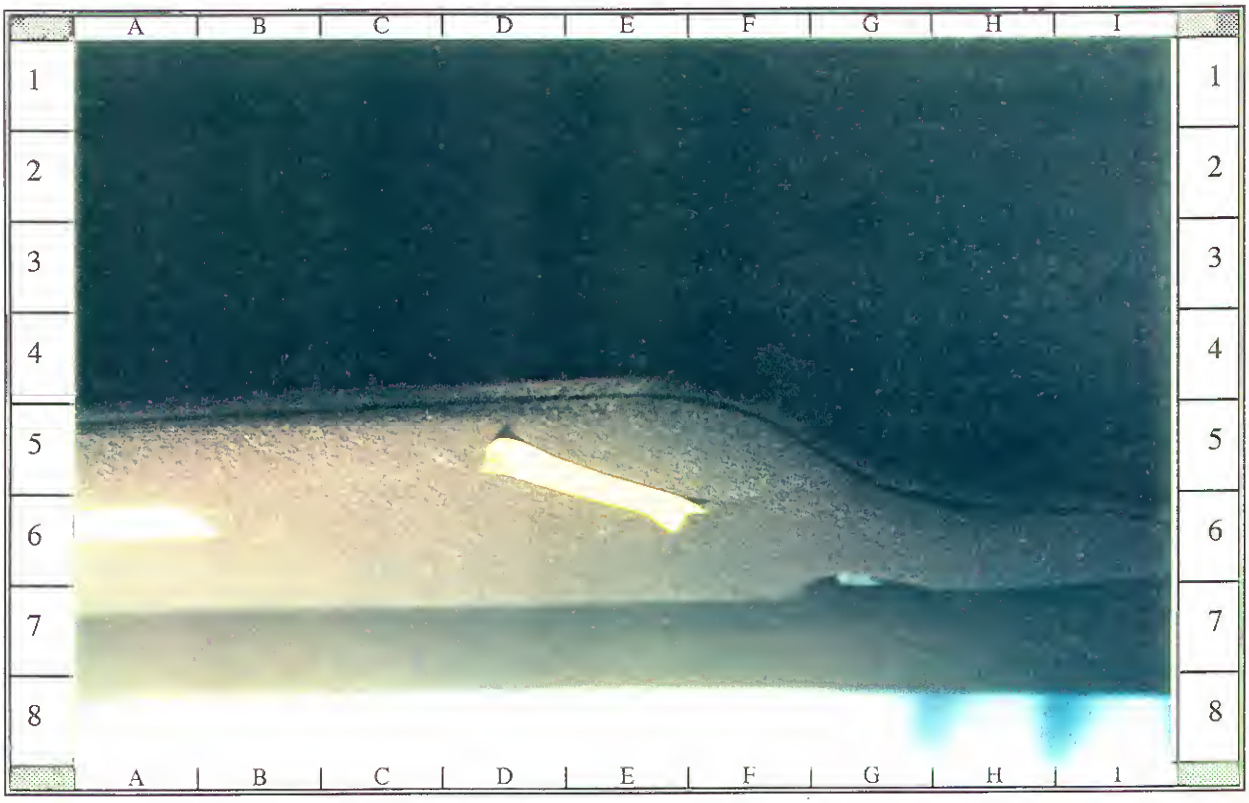
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



31: Closer-up view of possible skin transfer to middle right side of Case Vehicle's driver side air bag

32: Case Vehicle's driver side air bag module's noncontacted top cover flap and two closely spaced vent holes

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

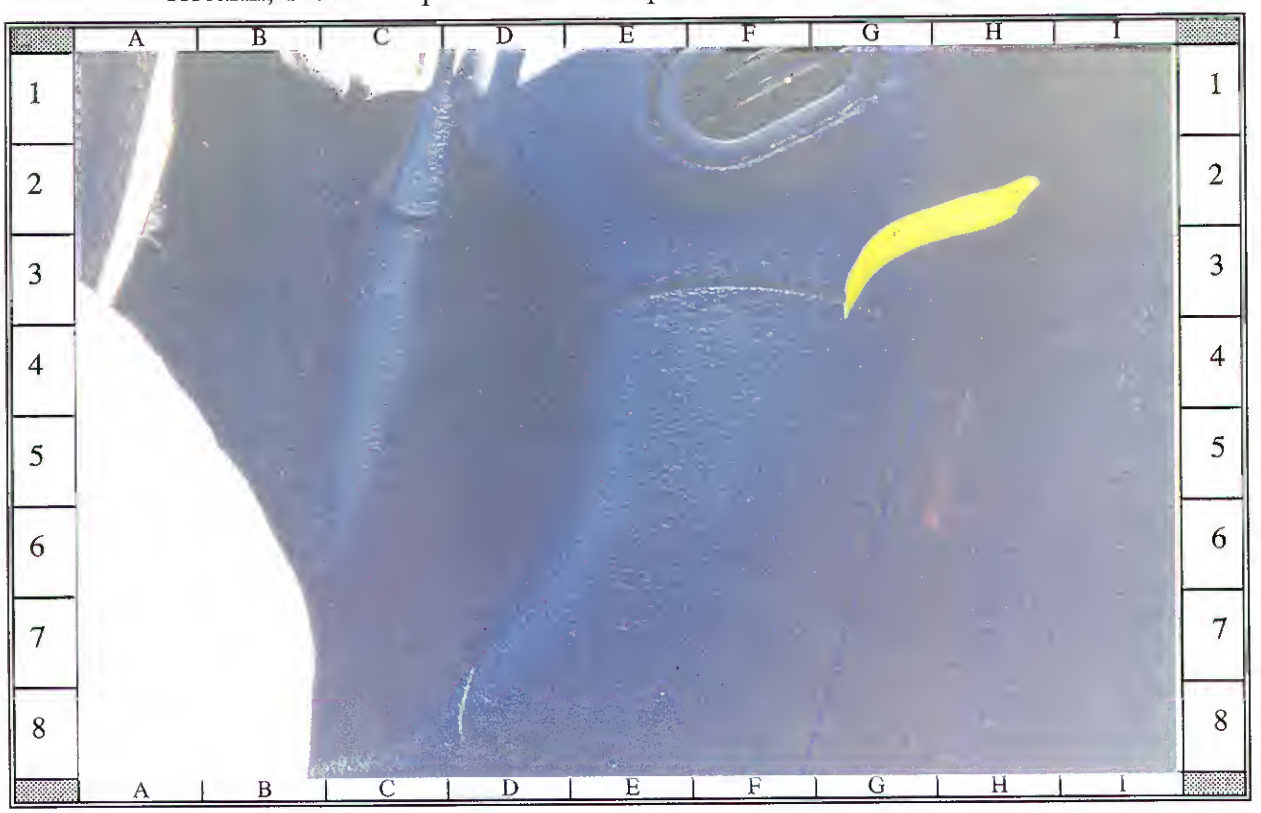


33: Case Vehicle's driver side sunvisor showing generant residue from driver side air bag's vent holes; NOTE: vent holes located at 11:30 and 12:30 positions

34: Closer-up view of air bag generant residue on corner of Case Vehicle's driver side sunvisor; NOTE: vent holes located at 11:30 and 12:30 positions

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

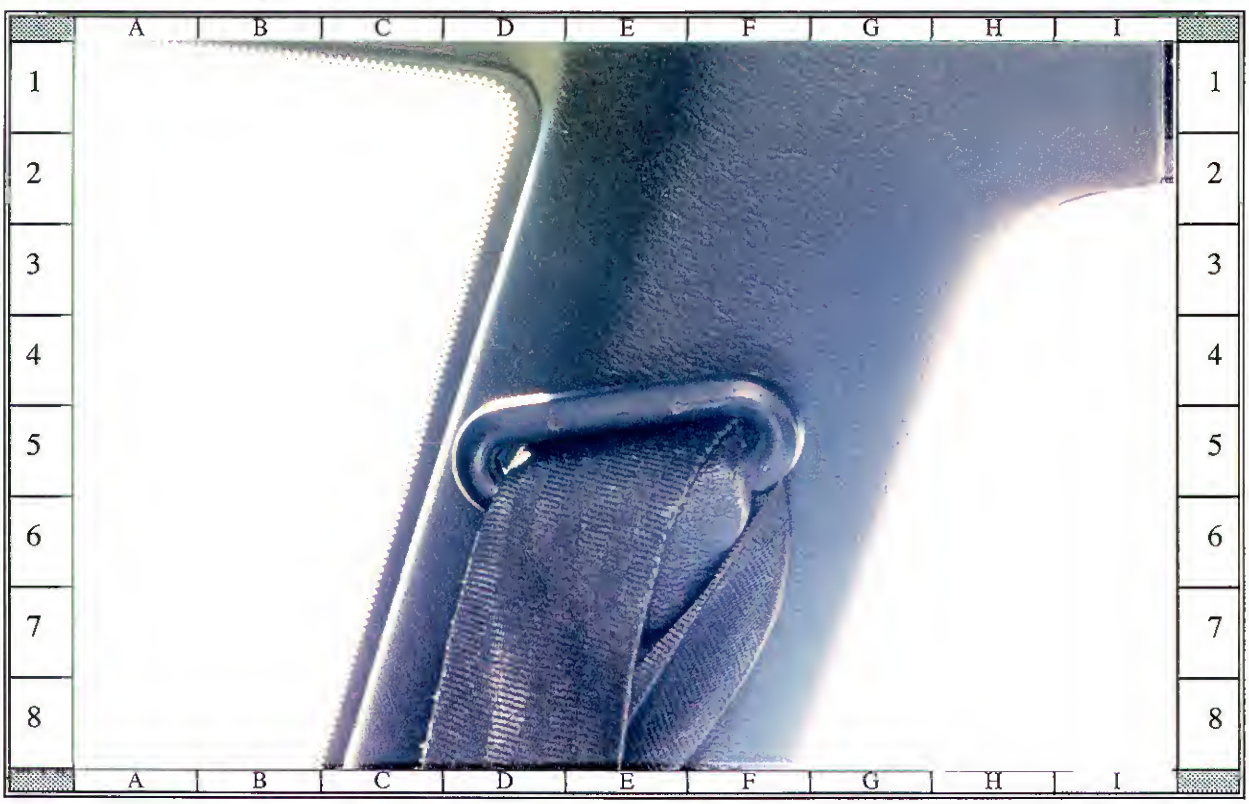
35: Case Vehicle's center console/drink holder showing contact from driver's right forearm; NOTE: tape near blood drop



36: Vertical overhead view of blood drops found on Case Vehicle's center console next to parking brake lever

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

37: Vertical view from outside of "D"-ring from Case Vehicle's driver side seat belt showing evidence of loading



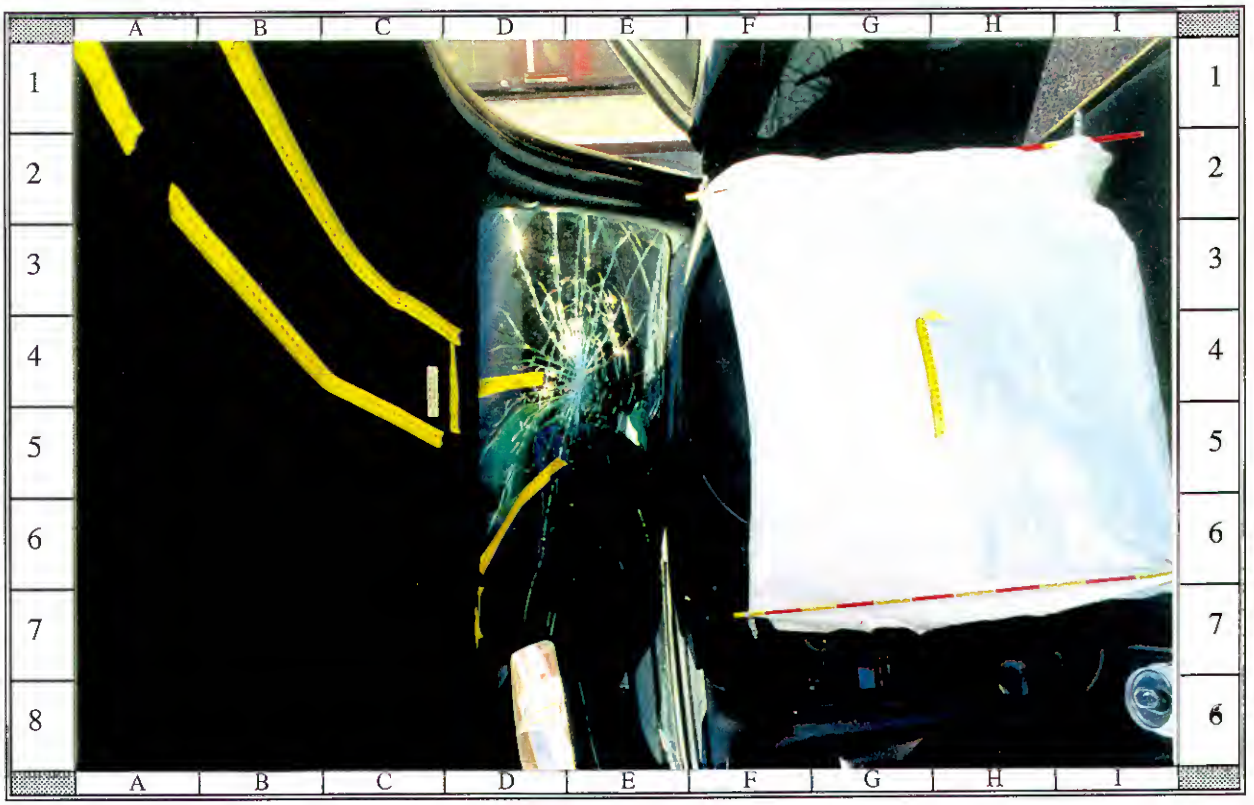
38: "D"-ring from Case Vehicle's driver side seat belt viewed from center front showing evidence of loading

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

39: Vertical close-up of Case Vehicle's driver side seatbelt webbing showing only storage mark near yellow tape

40: Panoramic view of Case Vehicle's deployed air bags; NOTE: contacts to right front (passenger side) windshield and sunvisor/roof

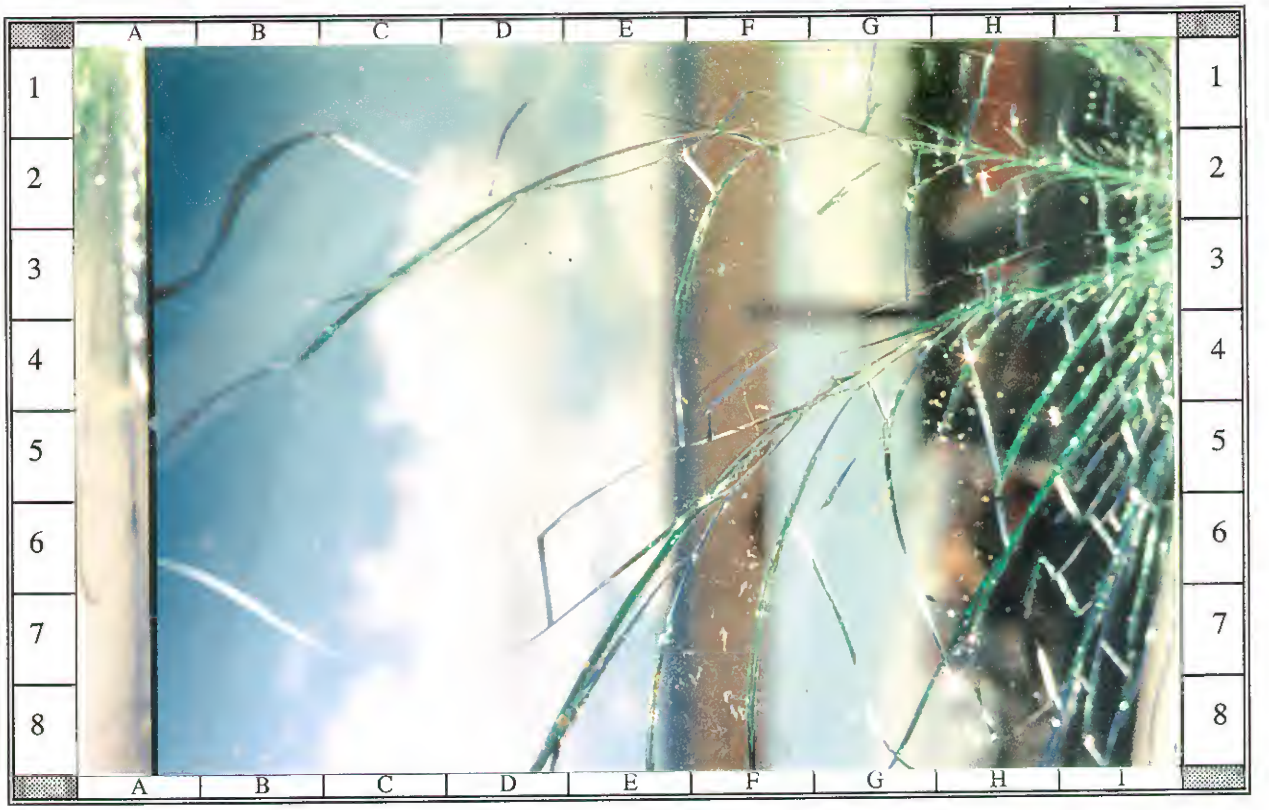
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



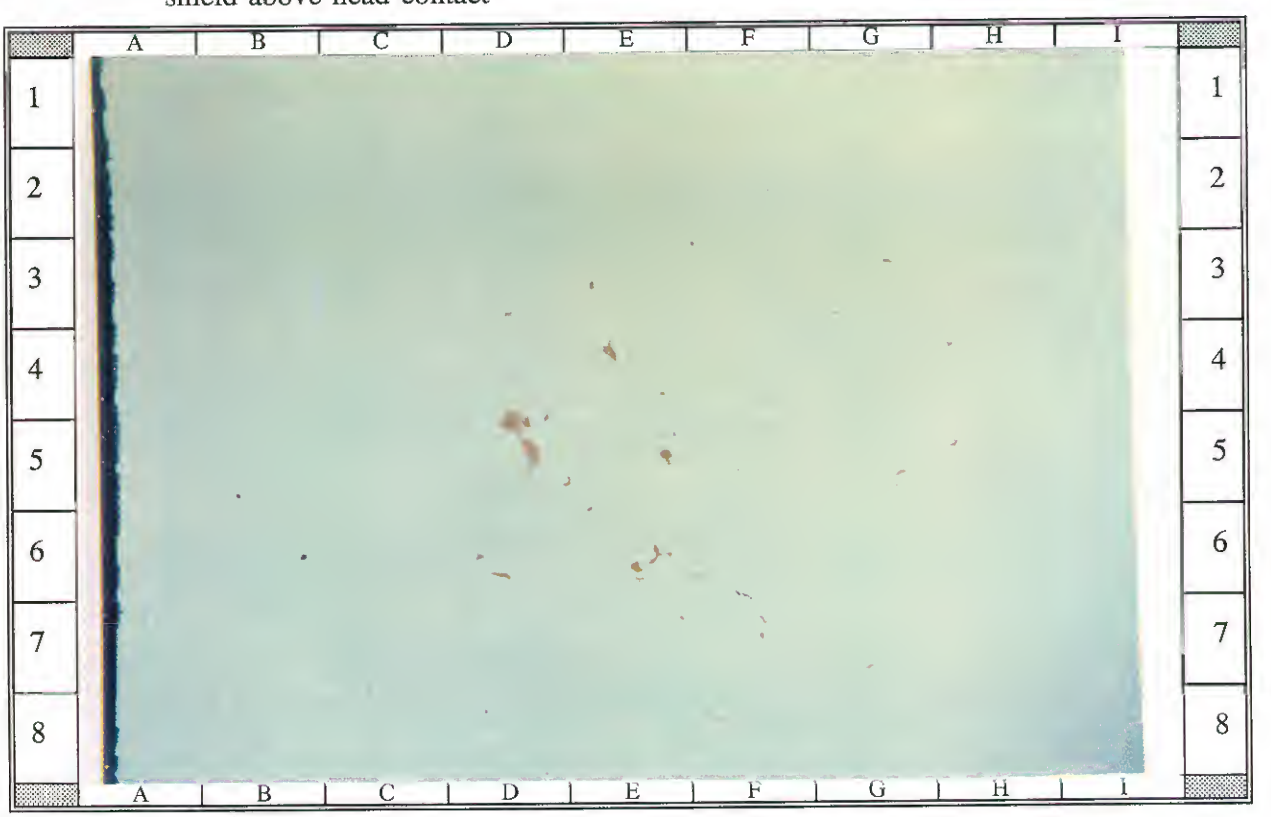
41: Vertical view of Case Vehicle's right front seating area showing contacts to right front air bag, windshield, sunvisor,and roof--highlighted by yellow tape

42: Close-up of Case Vehicle's right front windshield showing head contact; NOTE: rearview mirror and left corner of sunvisor were contacted by air bag

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

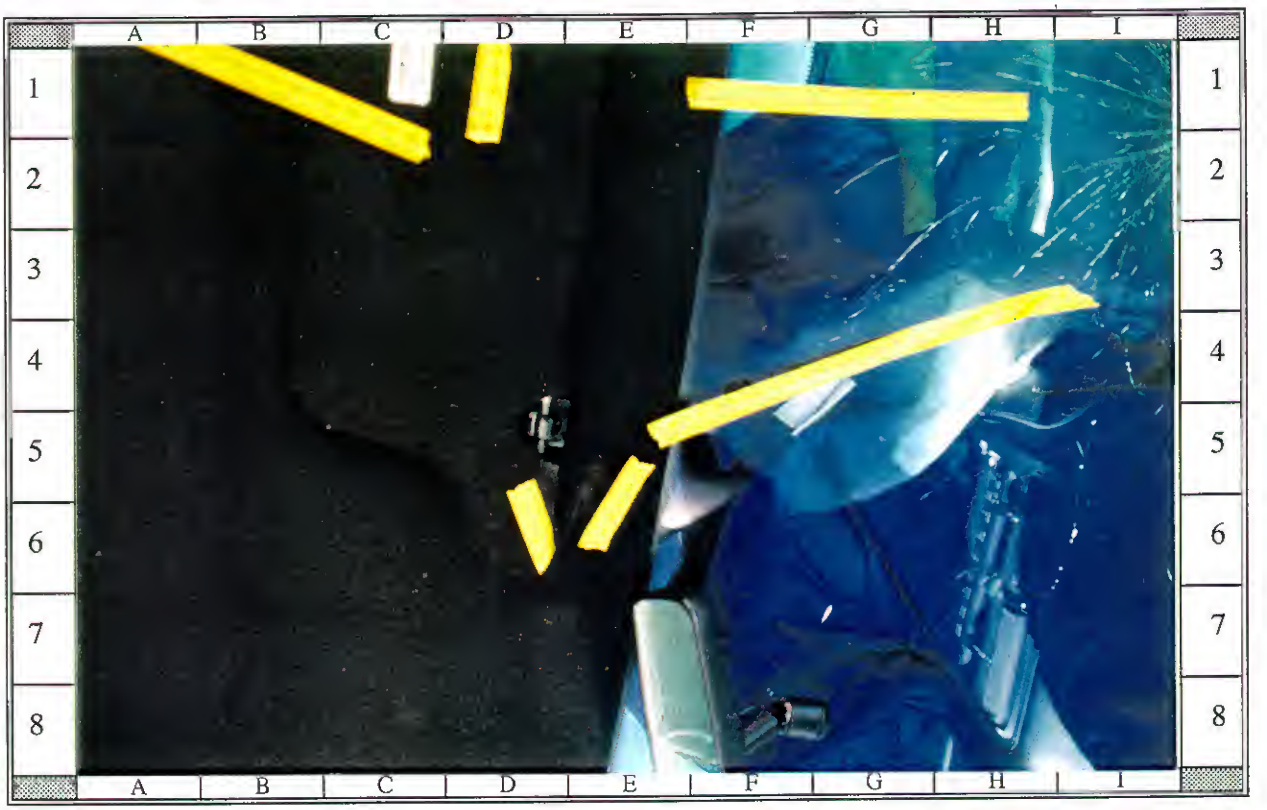


43: Vertical close-up of air bag exhaust spray on Case Vehicle's right front windshield above head contact

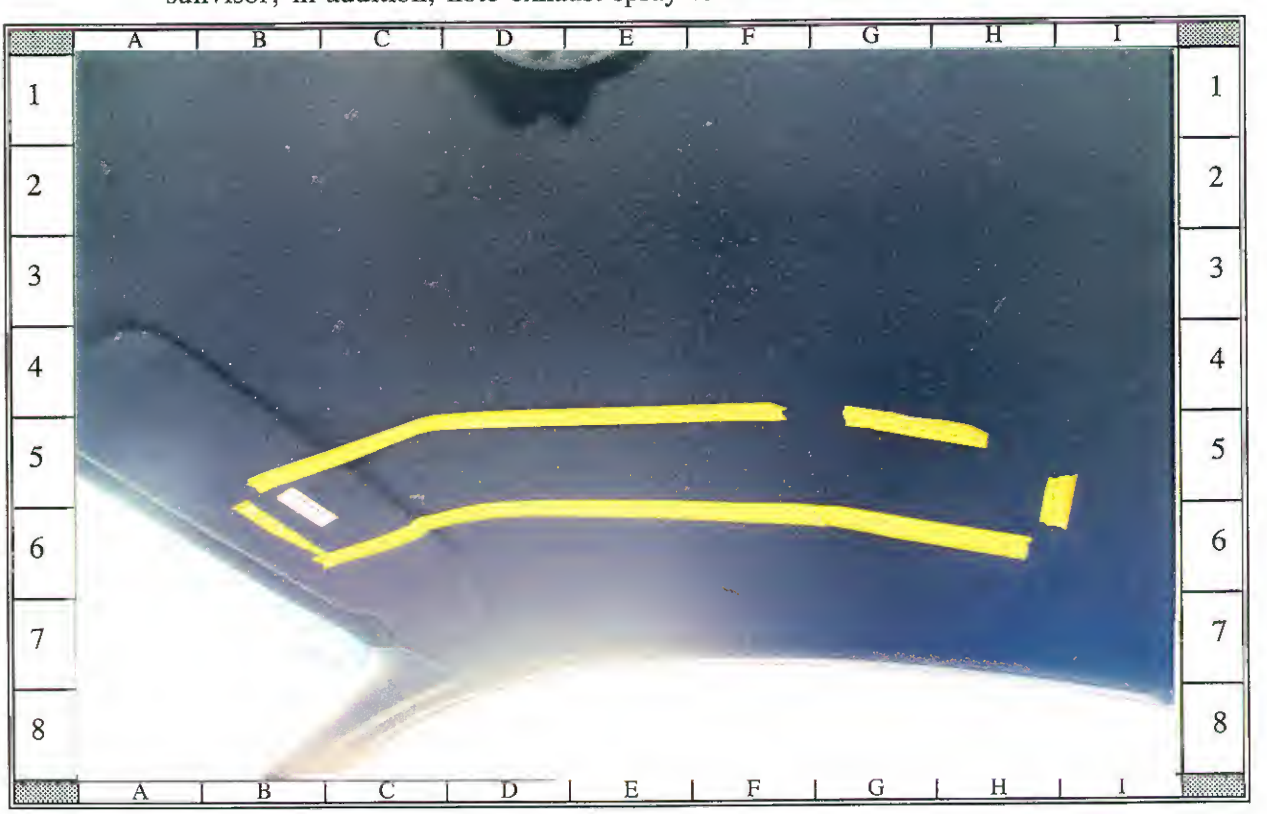


44: Close-up of evidence police collected from Case Vehicle's windshield contact; NOTE: definite hair but other evidence is most likely air bag exhaust

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



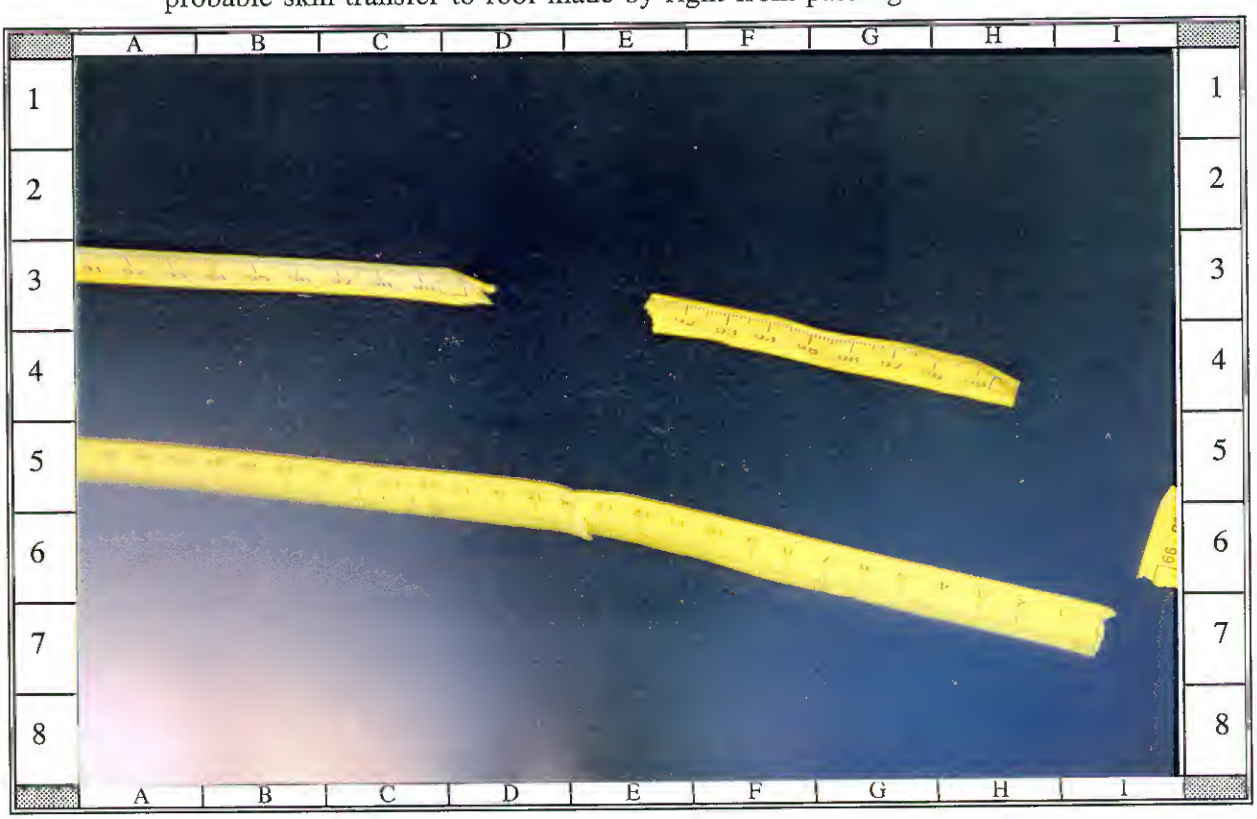
45: Vertical view of air bag contact to Case Vehicle's rearview mirror and corner of sunvisor; in addition, note exhaust spray to windshield



46: Case Vehicle's right front roof area viewed from driver's seat showing contact marks left by right front passenger

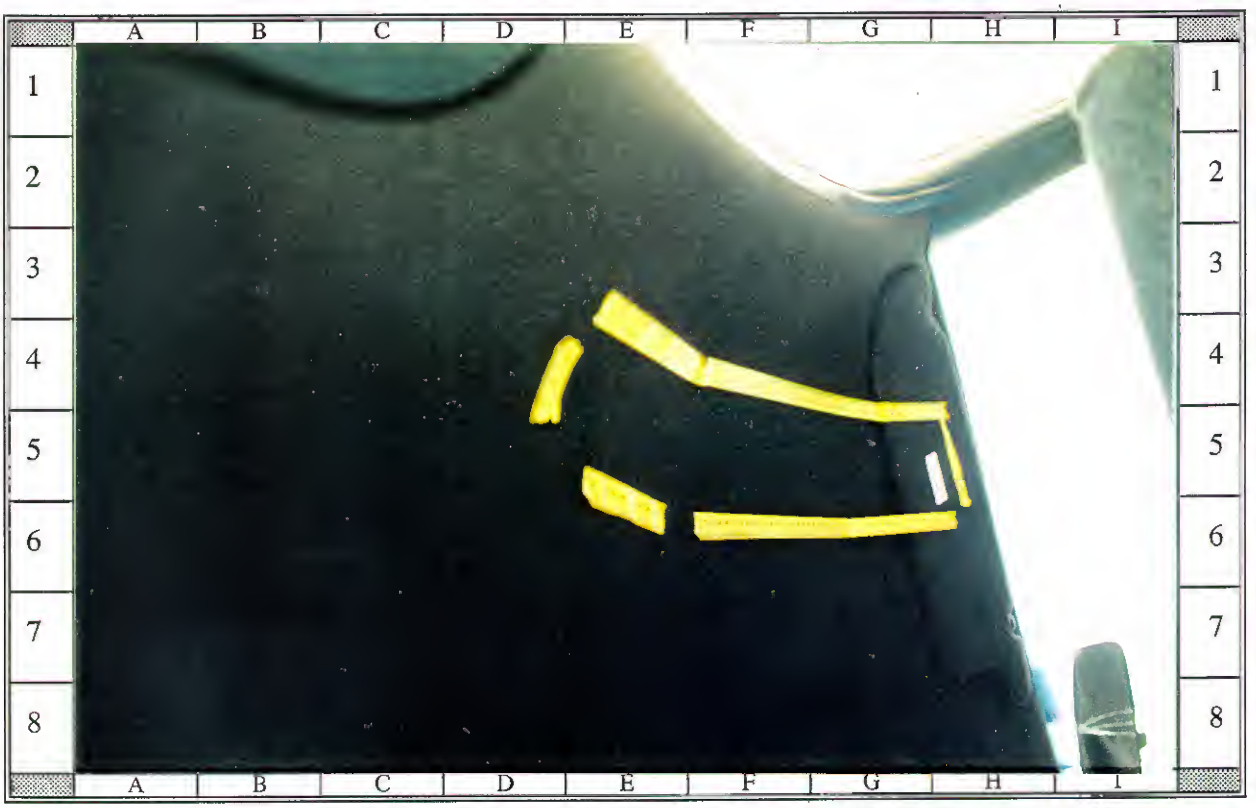
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

47: Close-up of Case Vehicle's right front roof area showing contacted sunvisor and probable skin transfer to roof made by right front passenger

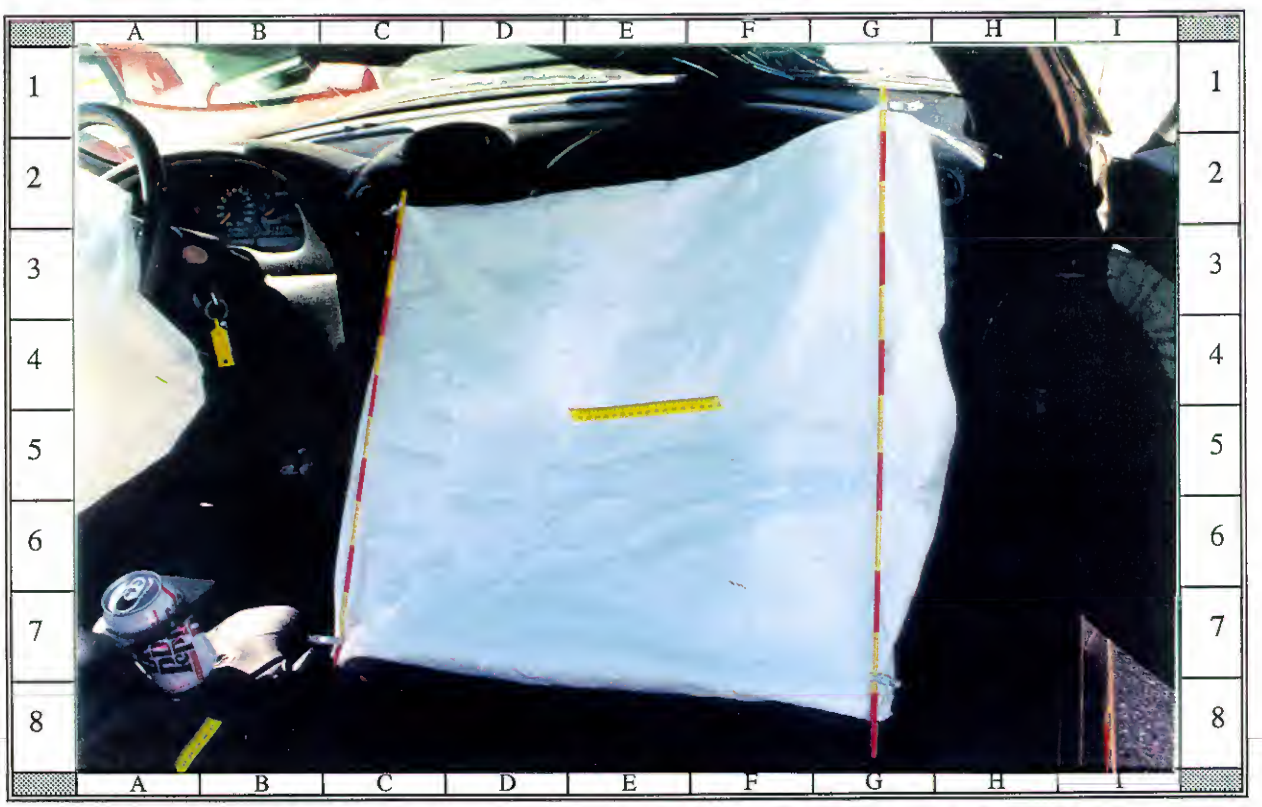


48: Close-up of probable skin transfer to Case Vehicle's right front roof made by right front passenger

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

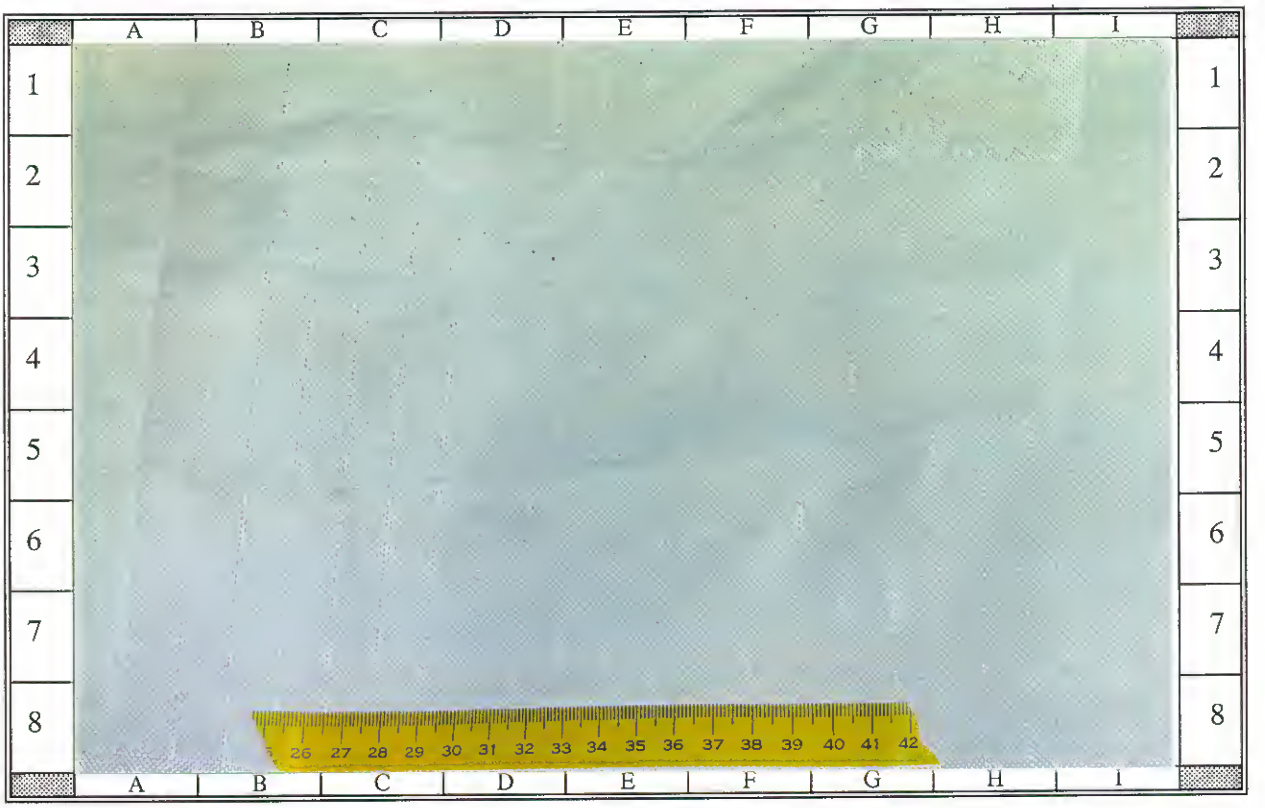


49: Vertical view of Case Vehicle's right front roof area from right rear seat showing roof contacts

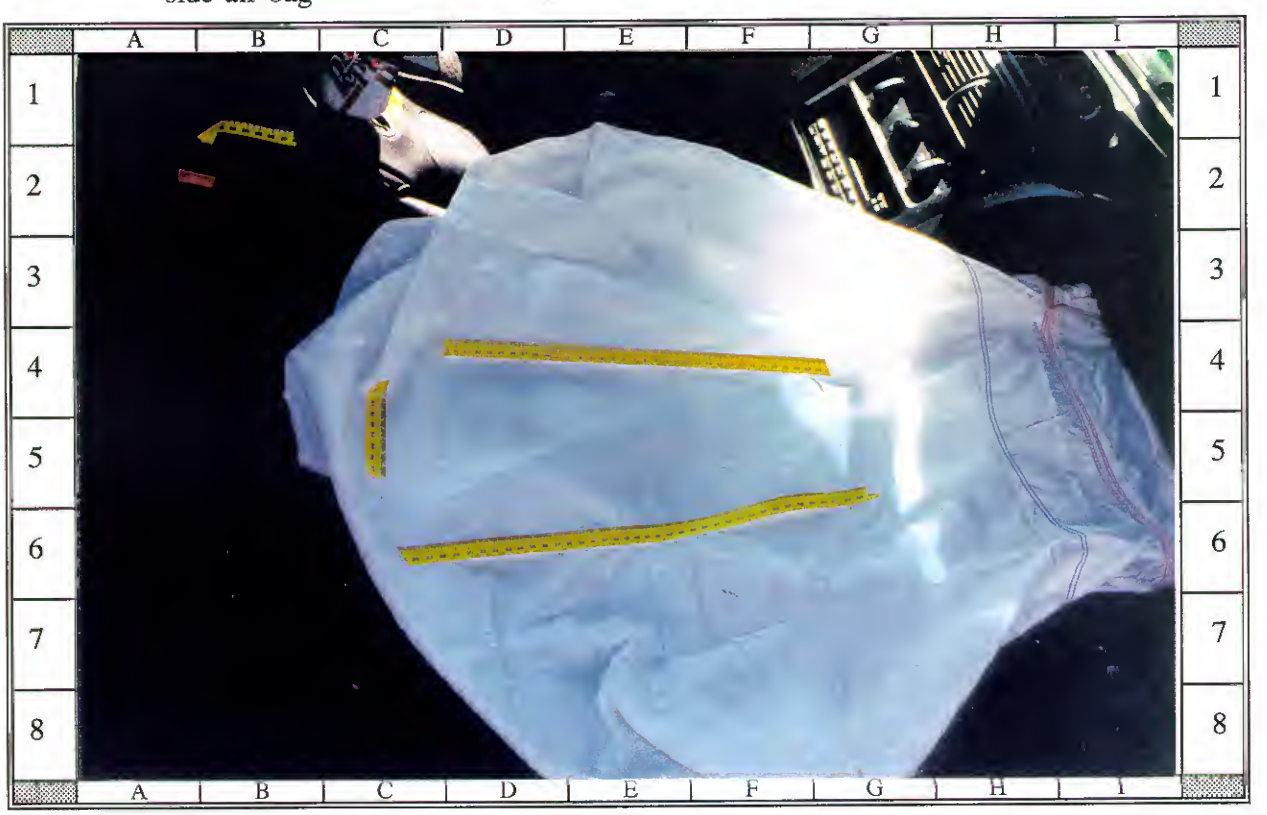


50: Case Vehicle's right front passenger side air bag; NOTE: tape in center indicates skin and oil smear

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

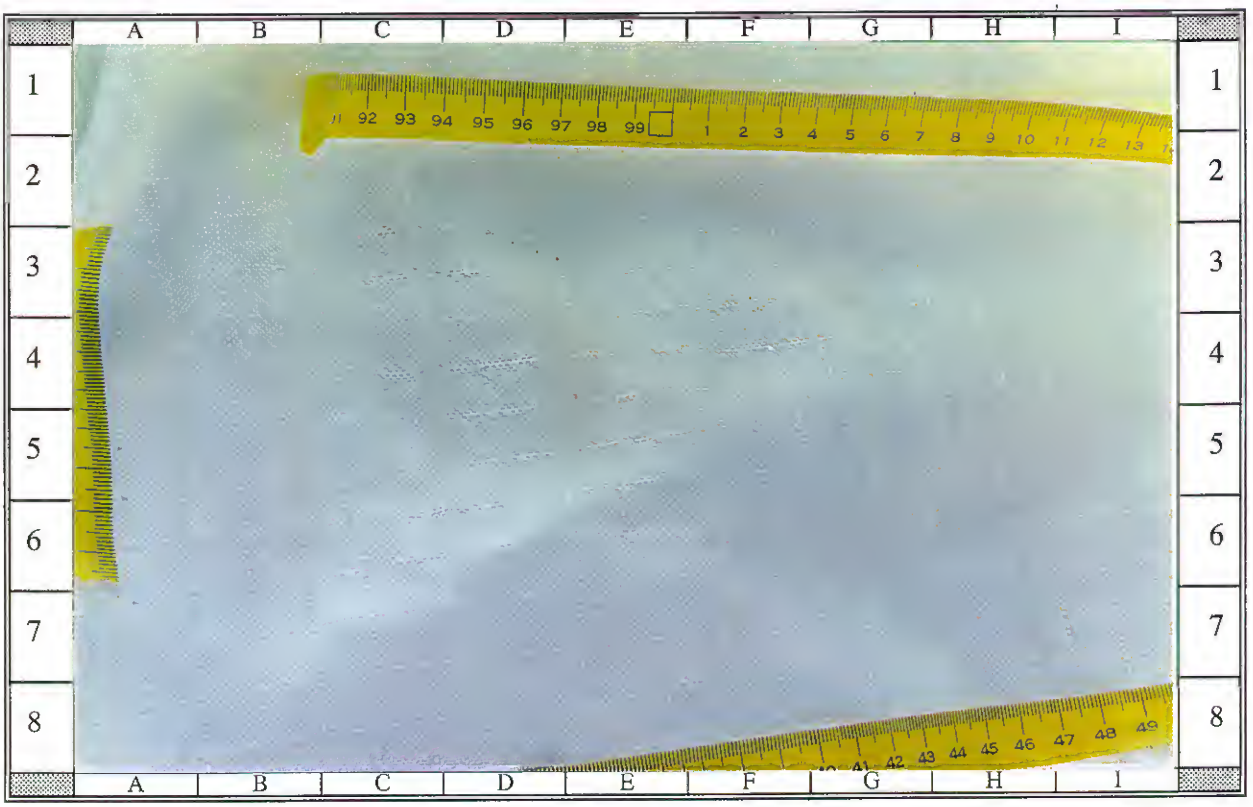


51: Close-up of skin and oil smears on front of Case Vehicle's right front passenger side air bag

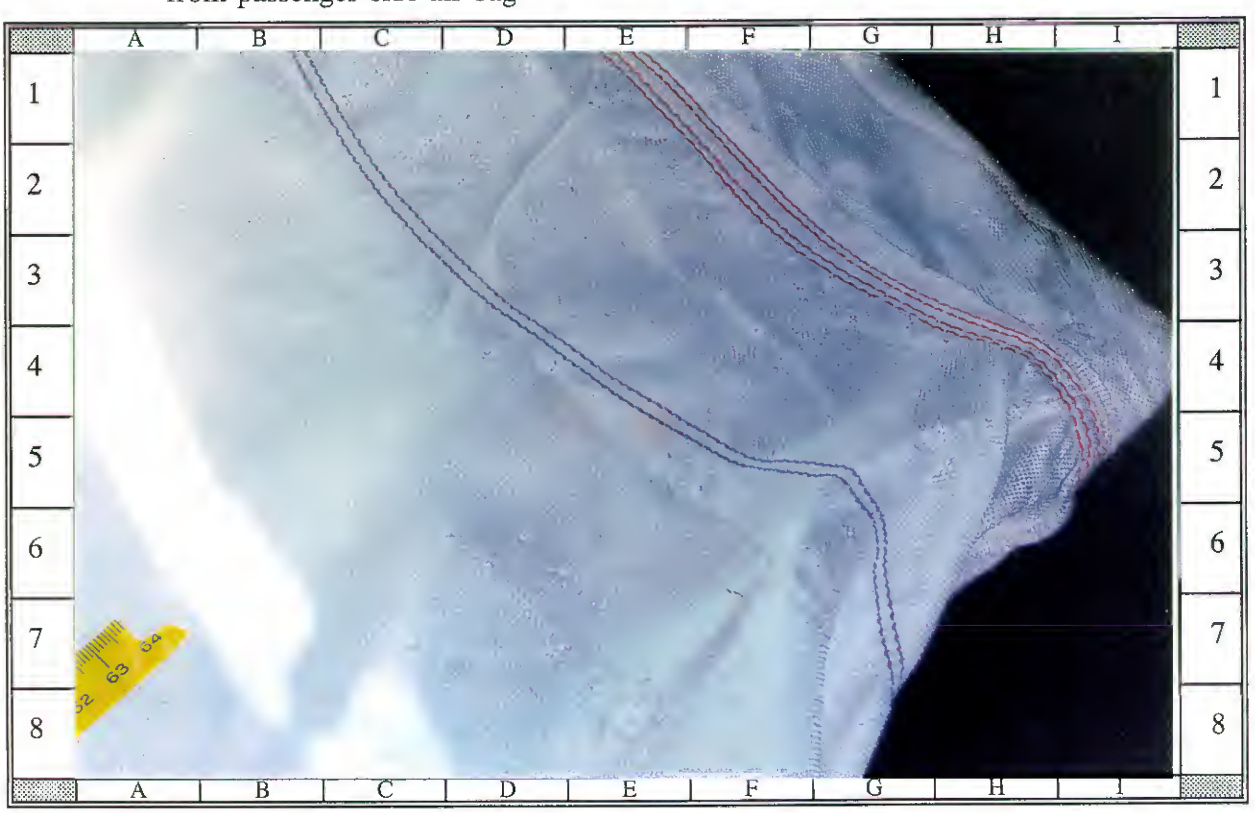


52: Top portion of Case Vehicle's right front passenger side air bag showing skin transfers and oil smears (i.e., enclosed by tape)

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



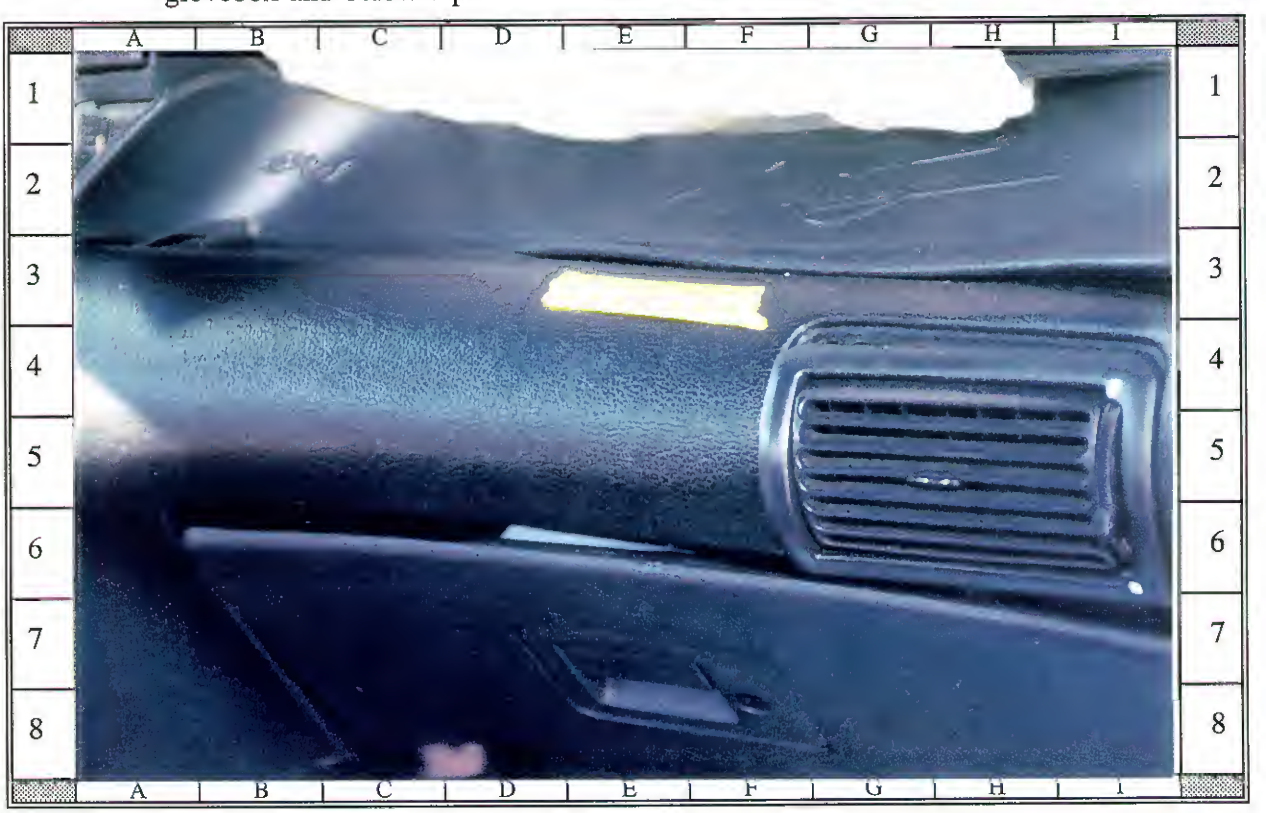
53: Close-up of skin transfers and oil smears to top portion of Case Vehicle's right front passenger side air bag



54: Close-up of apparent blood smear at top front of Case Vehicle's right front passenger side air bag; compare with cells H5--H6 of photograph #52 above

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

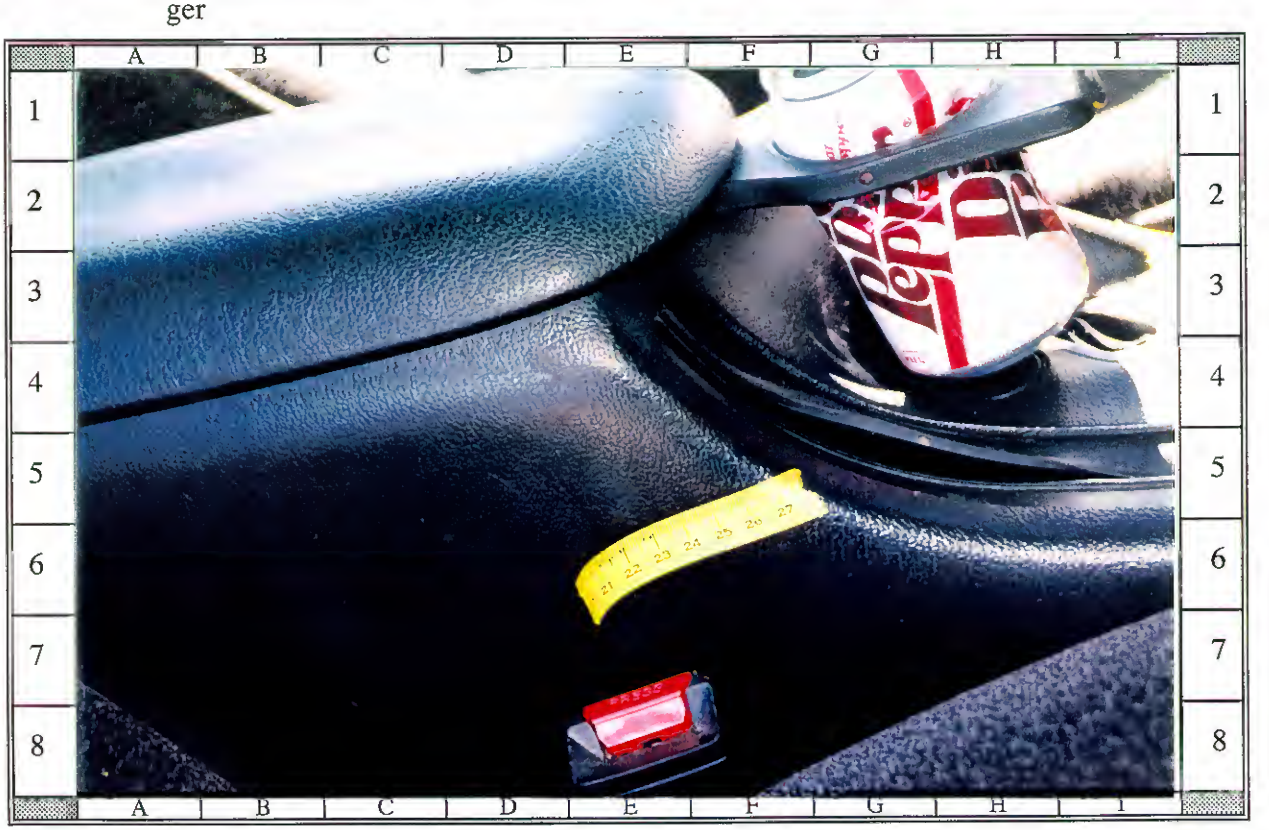
55: Case Vehicle's center and right front dash; NOTE: possible contact just above glovebox and below tape



56: Close-up of possible contact to Case Vehicle's right front dash (below tape) from right front passenger's lower torso

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

57: Dried blood stain on Case Vehicle's right front seatback from right front passenger



58: Blood smear (above tape) to passenger side of Case Vehicle's floor mounted center console

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

59: On-scene view of Case Vehicle's right front passenger seating area showing deployed driver and passenger side air bags; NOTE: passenger's seat reclined

60: Case Vehicle's front seating area showing interior surface of right front passenger's door panel and deployed driver and passenger side (displayed) air bags

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

61: Underside view from outside of "D"-ring from Case Vehicle's right front passenger seatbelt showing no evidence of loading; NOTE: "D"-ring is nonadjustable

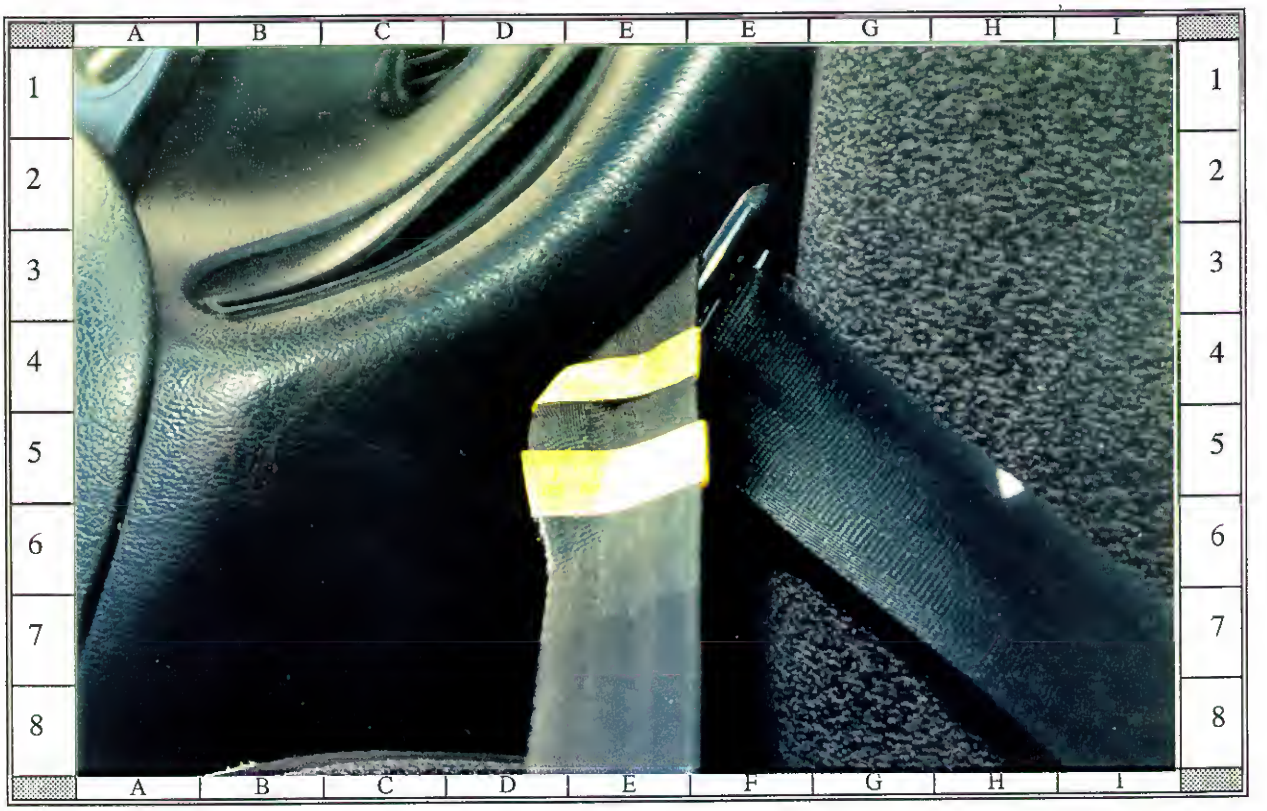
62: Front view from right front seat of "D"-ring from Case Vehicle's right front passenger seatbelt showing no evidence of loading

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

63: Front view from right rear seat of Case Vehicle's right front passenger side seat-belt webbing showing storage crease in webbing

64: Case Vehicle's right front passenger side seatbelt webbing showing storage crease (between tape) in webbing

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI



65: Vertical view of storage crease in Case Vehicle's right front passenger side seat-belt webbing; NOTE: no evidence of blood on webbing when latched

66: Front side of latch plate from Case Vehicle's right front passenger side seatbelt; NOTE: no evidence of loading, just prior usage

Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

67: Backside of latch plate from Case Vehicle's right front passenger side seatbelt showing no evidence of loading

68: Case Vehicle's rear seating area showing right rear seat where passenger was seated; NOTE: three-point belts and integral head restraints in outboard seats

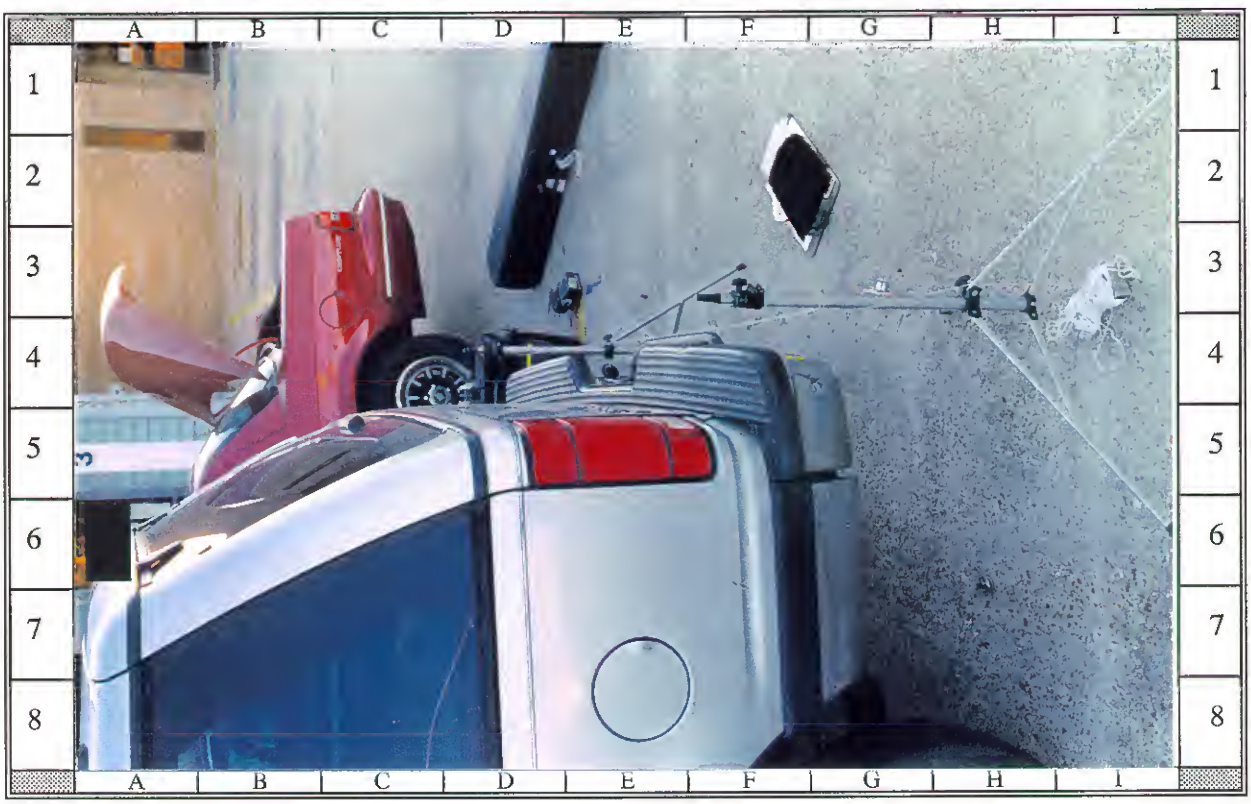
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

69: Case Vehicle's right front passenger seatback showing no evidence of contact from right rear passenger

70: 1991 Ford Explorer XL's undamaged front

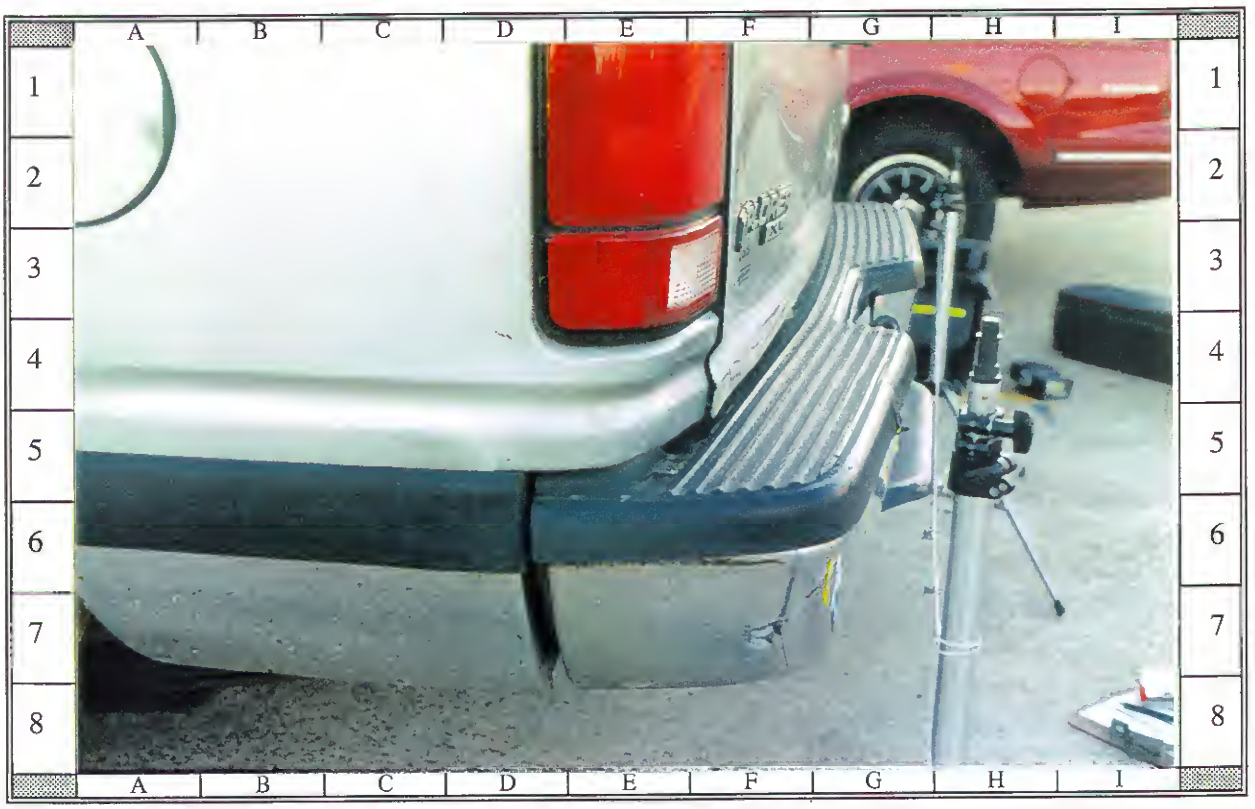
Case Vehicle: 1995 Ford Mustang, 2-Door Coupe, RWD, 4-Passenger, 3.8 L (232 in^3) V-6 SMPFI

71: Vehicle #2's undamaged front and left side viewed from approximately 60 degrees left of front



72: Vertical reference line view of Vehicle #2's contacted rear bumper from left; NOTE: minimal deformation

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI



73: Close-up reference line view from left of Vehicle #2's contacted back left corner; NOTE: slight deformation above bumper from Case Vehicle's hood

74: Vehicle #2's undamaged left side and damaged back left corner viewed from approximately 30 degrees left of back

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

75: Close-up of Vehicle #2's damaged back left corner viewed from approximately 10 degrees left of back; NOTE: only four C-measurements taken

76: Vehicle #2's damaged back; NOTE: length of damage confined to back left (i.e., yellow tape)

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

77: Straight on closer-up view of Vehicle #2's damaged back left corner

78: Vehicle #2's damaged back and undamaged right side viewed from approximately 15 degrees right of back

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

79: Vertical reference line view of Vehicle #2's damaged rear bumper from right; NOTE: right rear bumper corner pulled out slightly

80: Vehicle #2's undamaged right side and front viewed from approximately 45 degrees right of front

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

81: Interior surface of Vehicle #2's driver door panel, driver's steering wheel, seating area, and front dash

82: Panoramic view of Vehicle #2's driver side greenhouse area, steering wheel, and dash; NOTE: no evidence of loading, but cracked windshield is previous damage

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

83: Panoramic view of Vehicle #2's right front passenger side greenhouse area and dash; NOTE: no evidence of loading, but cracked windshield is previous damage

84: Vehicle #2's front seating area and front dash viewed from outside right front passenger door

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

85: Interior surface of Vehicle #2's right front passenger's door panel, seating area, and dash

86: Vehicle #2's rear seating area from left; NOTE: child safety seat located in center rear position at time of crash and no evidence of loading to driver's seatback

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

87: Interior surface of Vehicle #2's right rear door panel and right rear seating area from right; NOTE: no evidence of loading to right front passenger's seatback

88: Vehicle #2's rear seat and cargo area viewed from the front seat

Vehicle #2: 1991 Ford Explorer XL, 4-Door, RWD, 4x2, Sport Utility, 5-Passenger, 4.0 L (244 in^3) V-6 EFI

WARNING

The following page contains photographs with graphic detail which show the tragic consequences of a motor vehicle crash!

"GRAPHIC"
PHOTOGRAPHS AND IMAGES

The following "GRAPHIC" Photographs and Images have been removed from this case.

Photo # 89, 90

If you would like a copy of these photographs and/or images please write to:

MARJORIE SACCOCCIO
VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER
55 BROADWAY
CAMBRIDGE, MA 02142

In the body of your request please include the case, photograph and image number(s).

ACCIDENT COLLISION MEASUREMENT TABLE

U.S. Department of Transportation
National Highway Traffic Safety Administration

ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 10

Case Number—Stratum 9625

ACCIDENT COLLISION DIAGRAM

Document the physical plant:

- all road/roadway delineation (e.g., curbs/edge lines, line markings, median markings, pavement markings, parked vehicles, poles, signs, etc.)
- all traffic controls (e.g., signs/signals, etc.)
- north arrow placed on diagram
- roadway surface type and condition of applicable roadways
- grade measurements for all applicable roadways and at location of rollover initiation
- roadway curvature (include measurement of precrash superelevation for each vehicle if applicable)

Document vehicle dynamics including:

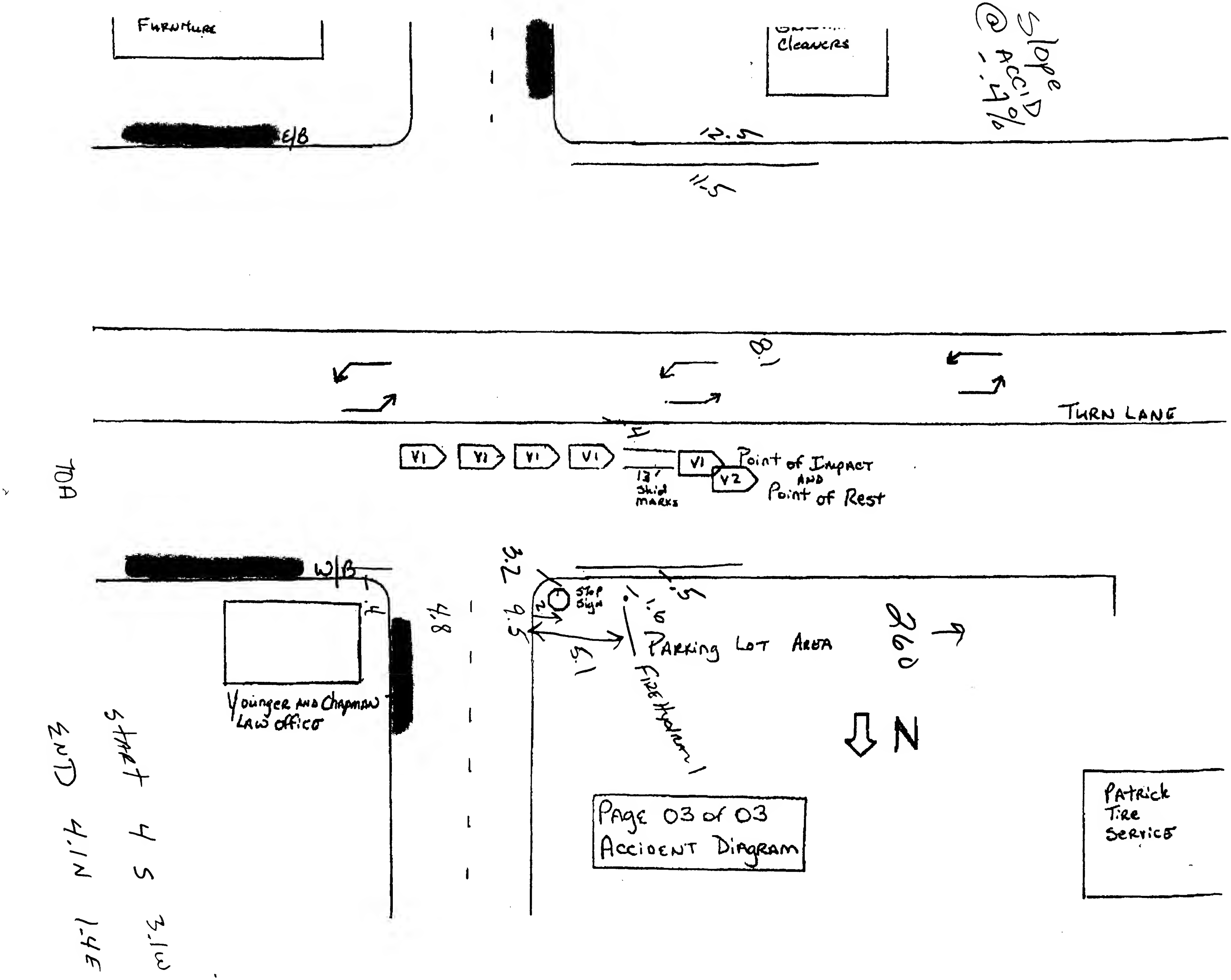
- reference point and reference line relative to physical features present at the scene
- scaled documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle		260	
Surface Type	B,T	B,T	
Surface Condition	DRY	DRY	
Coefficient of Friction			
Grade (v/h) Measurement (between impact and final rest)	-.4	-.4	
Grade (v/h) Measurement (at location of rollover initiation)			
Grade (v/h) Measurement (at pre-crash location)			

Reference Point: _____ Reference line: _____

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line



Furniture
Cleaners
[redacted]
E/B
12.5
11.5
Slope @ ACCID -.4%
8.1
TURN LANE
V1
V1
V1
V1
V1
V2
Point of Impact AND Point of Rest
13' Skid marks
TOA
[redacted]
W/B
4.8
3.2
9.5
Stop Sign
Fire Hydrant
PARKING LOT AREA
260
N
Younger and Chapman Law office
START 4 S 3.1W
END 4.1N 1.4E
Page 03 of 03
Accident Diagram
Patrick Tire Service

NASS CDS ACCIDENT FORM

U.S. Department of Transportation
National Highway Traffic Safety Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625

IDENTIFICATION

3. Number of General Vehicle Forms Submitted: 02
4. Date of Accident (Month,Day,Year): [redacted] 96
5. Time of Accident: 1618

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. ___ SS15 Administrative Use: 0
7. ___ SS16 Pedestrian Crash Data Study: 0
(Data for this special study available in a separate file.)
8. ___ SS17 Impact Fires: 0
9. ___ SS18 Unsafe Driver Actions: 0
10. ___ SS19 Run Off Road: 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident: 01

Code the number of events which occurred in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columnns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. 01	13. 01	14. 02	15. F	16. 02	17. 14	18. B
19. 02	20.	21.	22.	23.	24.	25.
26. 03	27.	28.	29.	30.	31.	32.
33 04	34.	35.	36.	37.	38.	39.
40. 05	41.	42.	43.	44.	45.	46.

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

HS Form 434 (Rev. 1/96)

CODES FOR CLASS OF VEHICLE

CV: 101.3 ⇒ 257

(00) Not a motor vehicle
(01) Subcompact/mini (wheelbase < 254 cm)
(02) Compact (wheelbase ≥ 254 but < 265 cm)
(03) Intermediate (wheelbase ≥ 265 but < 278 cm)
(04) Full size (wheelbase ≥ 278 but < 291 cm)
(05) Largest (wheelbase ≥ 291 cm)
(09) Unknown passenger car size
(14) Compact utility vehicle
(15) Large utility vehicle (≤ 4,536 kgs GVWR)
(16) Utility station wagon (≤ 4,536 kgs GVWR)
(19) Unknown utility type
(20) Minivan (≤ 4,536 kgs GVWR)
(21) Large van (≤ 4,536 kgs GVWR)
(24) Van Based school bus (≤ 4,536 kgs GVWR)
(28) Other van type (≤ 4,536 kgs GVWR)
(29) Unknown van type (≤ 4,536 kgs GVWR)
(30) Compact pickup truck (≤ 4,536 kgs GVWR)

VA: 112.0 ⇒ 284

(31) Large pickup truck (≤ 4,536 kgs GVWR)
(38) Other pickup truck (≤ 4,536 kgs GVWR)
(39) Unknown pickup truck type (≤ 4,536 kgs GVWR
(45) Other light truck (≤ 4,536 kgs GVWR)
(48) Unknown light truck type (≤ 4,536 kgs GVWR)
(49) Unknown light vehicle type
(50) School bus (excludes van based)(>4,536 kgs GVWR)
(58) Other bus (> 4,536 kgs GVWR)
(59) Unknown bus type
(60) Truck (> 4,536 kgs GVWR)
(67) Tractor without trailer
(68) Tractor-trailer(s)
(78) Unknown medium/heavy truck type
(79) Unknown light/medium/heavy truck type
(80) Motored cycle
(90) Other vehicle
(99) Unknown

CODES FOR GENERAL AREA OF DAMAGE (GAD)

CDS APPLICABLE AND OTHER VEHICLES	(0) Not a motor vehicle	(R) Right side	(T) Top
	(N) Noncollision	(L) Left side	(U) Undercarriage
	(F) Front	(B) Back	(9) Unknown

TDC APPLICABLE VEHICLES	(0) Not a motor vehicle	(L) Left side	(C) Rear of cab
	(N) Noncollision	(B) Back of unit with cargo area (rear of trailer or straight truck)	(V) Front of cargo area
	(F) Front		(T) Top
	(R) Right side	(D) Back (rear of tractor)	(U) Undercarriage
			(9) Unknown

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
(31) Overturn — rollover (excludes end-over-end)
(32) Rollover — end-over-end
(33) Fire or explosion
(34) Jackknife
(35) Other intraunit damage (specify):
_____
(36) Noncollision injury
(38) Other noncollision (specify):
_____
(39) Noncollision — details unknown

Collision With Fixed Object
(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment
(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail) (specify):_____
(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify):
_____
(69) Unknown fixed object

Collision with Nonfixed Object
(70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance
_____
(75) Vehicle occupant
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify):
_____
(89) Unknown nonfixed object

(98) Other event (specify):
_____
(99) Unknown event or object

NASS CDS VEHICLE FORMS: CASE VEHICLE

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 01

VEHICLE IDENTIFICATION

4. Vehicle Model Year: 93
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): FORD 12
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): MUSTANG 003
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type: 02
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number
   1FALP[redacted]
   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
   Left justify; Slash zeros and letter Z (0 andZ)
   No VIN—Code all zeros
   Unknown—Code all nines

9. Vehicle Special Use (This Trip): 0
   (0) No special use
   (1) Taxi
   (2) Vehicle used as school bus
   (3) Vehicle used as other bus
   (4) Military
   (5) Police
   (6) Ambulance
   (7) Fire truck or car
   (8) Other (specify): _____
   (9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition: 0
    (0) Not towed due to vehicle damage
    (1) Towed due to vehicle damage
    (9) Unknown

11. Police Reported Travel Speed: 999
    Code to the nearest kmph (NOTE: 000 means less than 0.5 kmph)
    (160) 159.5 kmph and above
    (999) Unknown

    __ __ mph X 1.6093 = __ __ __ kmph

12. Speed Limit: 040
    (000) No statutory limit
    Code posted or statutory speed limit in kmph
    (999) Unknown

    25 mph X 1.6093 = 40 kmph

13. Police Reported Alcohol Presence For Driver: 0
    (0) No alcohol present
    (1) Yes alcohol present
    (7) Not reported
    (8) No driver present
    (9) Unknown

14. Alcohol Test Result For Driver: 00
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown

    Source: INV. officer

15. Police Reported Other Drug Presence For Driver: 0
    (0) No other drug(s) present
    (1) Yes other drug(s) present
    (7) Not reported
    (8) No driver present
    (9) Unknown

16. Other Drug Specimen Test Result For Driver: 0
    (0) No specimen test given
    (1) Drug(s) not found in specimen
    (2) Drug(s) found in specimen, (specify): _____
    (3) Specimen test given, results unknown or not obtained
    (8) No driver present
    (9) Unknown if specimen test given

17. Driver's Zip Code [redacted]
    (00001) Driver not a resident of U.S. or territories
    _____ Code actual 5-digit zip code
    (99998) No driver present
    (99999) Unknown

18. Driver's Race/Ethnic Origin: 1
    (1) White (non-Hispanic)
    (2) Black (non-Hispanic)
    (3) White (Hispanic)
    (4) Black (Hispanic)
    (5) American Indian, Eskimo or Aleut
    (6) Asian or Pacific Islander
    (7) Other (specify): _____
    (8) No driver present
    (9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

(01) Convertible (excludes sun-roof, t-bar)
(02) 2-door sedan, hardtop, coupe
(03) 3-door/2-door hatchback
(04) 4-door sedan, hardtop
(05) 5-door/4-door hatchback
(06) Station wagon (excluding van and truck based)
(07) Hatchback, number of doors unknown
(08) Other automobile type (specify):

_____

(09) Unknown automobile type

Automobile Derivatives

(10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
(11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
(12) Large limousine - more than four side doors or stretched chassis
(13) Three-wheel automobile or automobile derivative

Utility Vehicles (≤ 4,536 kgs GVWR)

(14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
(15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
(16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
(19) Utility, unknown body type

Van Based Light Trucks (≤ 4,536 kgs GVWR)

(20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
(21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
(22) Step van or walk-in van (≤ 4,536 kgs GVWR)
(23) Van based motorhome (≤ 4,536 kgs GVWR)
(24) Van based school bus (≤ 4,536 kgs GVWR)
(25) Van based other bus (≤ 4,536 kgs GVWR)
(28) Other van type (Hi-Cube Van, Kary) (specify):

_____

(29) Unknown van type

Light Conventional Trucks (Pickup style cab, ≤ 4,536 kgs GVWR)

(30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10 , T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
(31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
(32) Pickup with slide-in camper
(33) Convertible pickup
(39) Unknown pickup style light conventional truck type

Other Light Trucks (≤ 4,536 kgs GVWR)

(40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
(41) Truck based panel
(42) Light truck based motorhome (chassis mounted)
(45) Other light conventional truck type
(48) Unknown light truck type
(49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

(50) School bus (designed to carry students, not cross country or transit)
(58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):

_____

(59) Unknown bus type

Medium/Heavy Trucks (> 4,536 kgs GVWR)

(60) Step van (> 4,536 kgs GVWR)
(61) Single unit straight truck (4,536 kgs < GVWR ≤ 8,845 kgs)
(62) Single unit straight truck (8,845 kgs < GVWR ≤ 11,793 kgs)
(63) Single unit straight truck (> 11,793 kgs GVWR)
(64) Single unit straight truck, GVWR unknown
(65) Medium/heavy truck based motorhome
(67) Truck-tractor with no cargo trailer
(68) Truck-tractor pulling one trailer
(69) Truck-tractor pulling two or more trailers
(70) Truck-tractor (unknown if pulling trailer)
(78) Unknown medium/heavy truck type
(79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

(80) Motorcycle
(81) Moped (motorized bicycle)
(82) Three-wheel motorcycle or moped
(88) Other motored cycle (minibike, motorscooter) (specify):_____
(89) Unknown motored cycle type

Other Vehicles

(90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
(91) Snowmobile
(92) Farm equipment other than trucks
(93) Construction equipment other than trucks
(97) Other vehicle type
(99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction — 2
    (0) Non-interchange area and non-junction
    (1) Interchange area related

    Non-Interchange junctions
    (2) Intersection related
    (3) Driveway, alley access related
    (4) Other junction (specify)

    _____
    (5) Unknown type of junction

    (9) Unknown

20. Trafficway Flow — 0
    (0) Not physically divided (two way traffic)
    (1) Divided trafficway-median strip without positive barrier
    (2) Divided trafficway-median strip with positive barrier
    (3) One way traffic
    (9) Unknown

21. Number Of Travel Lanes — 3
    (1) One
    (2) Two
    (3) Three
    (4) Four
    (5) Five
    (6) Six
    (7) Seven or more
    (9) Unknown

22. Roadway Alignment — 1
    (1) Straight
    (2) Curve right
    (3) Curve left
    (9) Unknown

23. Roadway Profile — 1 — -.4%
    (1) Level
    (2) Uphill grade (>2%)
    (3) Hill crest
    (4) Downhill grade (>2%)
    (5) Sag
    (9) Unknown

24. Roadway Surface Type — 2
    (1) Concrete
    (2) Bituminous (asphalt)
    (3) Brick or block
    (4) Slag, gravel, or stone
    (5) Dirt
    (8) Other (specify): _____
    (9) Unknown

25. Roadway Surface Condition — 1
    (1) Dry
    (2) Wet
    (3) Snow or slush
    (4) Ice
    (5) Sand, dirt, or oil
    (8) Other (specify): _____
    (9) Unknown

26. Light Conditions — 1
    (1) Daylight
    (2) Dark
    (3) Dark, but lighted
    (4) Dawn
    (5) Dusk
    (9) Unknown

27. Atmospheric Conditions — 0
    (0) No adverse atmospheric-related driving conditions
    (1) Rain
    (2) Sleet/hail
    (3) Snow
    (4) Fog
    (5) Rain and fog
    (6) Sleet and fog
    (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify):

    _____
    (9) Unknown

28. Traffic Control Device — 1
    (0) No traffic control(s)
    (1) Traffic control signal (not RR crossing)

    Regulatory
    (2) Stop sign
    (3) Yield sign
    (4) School zone sign
    (5) Other regulatory sign (specify):

    _____
    (6) Warning sign (not RR crossing)
    (7) Unknown sign
    (8) Miscellaneous/other controls including RR controls (specify):

    _____
    (9) Unknown

29. Traffic Control Device Functioning — 2
    (0) No traffic control device
    (1) Traffic control device not functioning (specify):

    _____
    (2) Traffic control device functioning properly
    (9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 03
(00) No driver present
(01) Attentive or not distracted
(02) Looked but did not see

Distractions
(03) By other occupant(s), (specify): talking & Listening+looking
(04) By moving object in vehicle (specify): _____
(05) While talking or listening to cellular phone (specify location and type of phone): _____
(06) While dialing cellular phone (specify location and type of phone): _____
(07) While adjusting climate controls
(08) While adjusting radio, cassette, CD (specify): _____
(09) While using other device/controls integral to vehicle (specify): _____
(10) While using or reaching for device/object brought into vehicle (specify): _____
(11) Sleepy or fell asleep
(12) Distracted by outside person, object, or event (specify): _____
(13) Eating or drinking
(14) Smoking related
(97) Distracted/inattentive, details unknown
(98) Other, distraction (specify): _____
(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 01
(00) No driver present
(01) Going straight
(02) Decelerating in traffic lane
(03) Accelerating in traffic lane
(04) Starting in traffic lane
(05) Stopped in traffic lane
(06) Passing or overtaking another vehicle
(07) Disabled or parked in travel lane
(08) Leaving a parking position
(09) Entering a parking position
(10) Turning right
(11) Turning left
(12) Making a U-turn
(13) Backing up (other than for parking position)
(14) Negotiating a curve
(15) Changing lanes
(16) Merging
(17) Successful avoidance maneuver to a previous critical event
(97) Other (specify): _____
(99) Unknown

32. Critical Precrash Event 50

THIS VEHICLE LOSS OF CONTROL DUE TO:
(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

THIS VEHICLE TRAVELLING
(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(18) This vehicle decelerating
(19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE
(50) Other vehicle stopped
(51) Traveling in same direction with lower steady speed
(52) Traveling in same direction while decelerating
(53) Traveling in same direction with higher speed
(54) Traveling in opposite direction
(55) In crossover
(56) Backing
(59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE
(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST
(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway (specify): _____
(84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

OBJECT OR ANIMAL
(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location
(98) Other critical precrash event (specify): _____
(99) Unknown

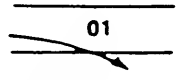
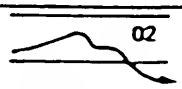
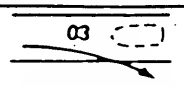
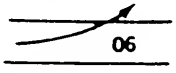
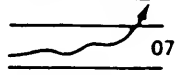
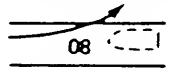
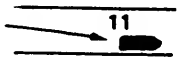
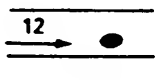
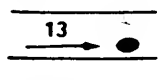
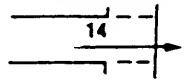
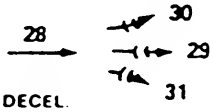
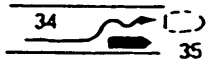
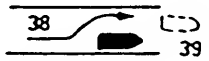
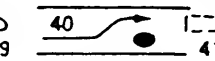
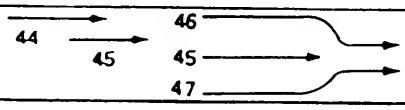
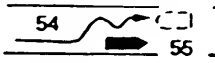
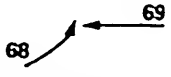
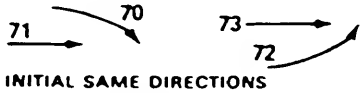
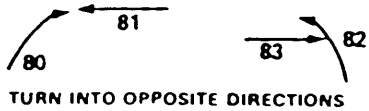
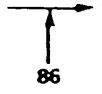
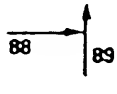
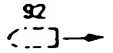
33. Attempted Avoidance Maneuver 08
(00) No driver present
(01) No avoidance maneuver
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left with lock-up
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(98) Other action (specify): _____
(99) Unknown

34. Pre-Impact Stability 2
(0) No driver present
(1) Tracking
(2) Skidding longitudinally—rotation less than 30 degrees
(3) Skidding laterally—clockwise rotation
(4) Skidding laterally—counterclockwise rotation
(7) Other vehicle loss-of-control (specify): _____
(9) Precrash stability unknown

35. Pre-Impact Location 1
(0) No driver present
(1) Stayed in original travel lane
(2) Stayed on roadway but left original travel lane
(3) Stayed on roadway, not known if left original travel lane
(4) Departed roadway
(5) Remained off roadway
(6) Returned to roadway
(7) Entered roadway
(9) Unknown

36. Accident Type 20
(Note: Applicable codes on back of this page)
(00) No impact
Code the number of the diagram that best describes the accident circumstance
(98) Other accident type (specify): _____
(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 22 21 23 STOPPED 21, 22, 23	 24 26 25 27 SLOWER 25, 26, 27	 28 30 29 31 DECEL. 29, 30, 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 35 CONTROL/ TRACTION LOSS	 36 37 CONTROL/ TRACTION LOSS	 38 39 AVOID COLLISION WITH VEH.	 40 41 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 45 46 45 47			(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On	 50 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER		(EACH • 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 55 CONTROL/ TRACTION LOSS	 56 57 CONTROL/ TRACTION LOSS	 58 59 AVOID COLLISION WITH VEH.	 60 61 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER		(EACH • 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 69 INITIAL OPPOSITE DIRECTIONS	 71 70 73 72 INITIAL SAME DIRECTIONS			(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN
	K Turn Into Path	 76 77 78 79 TURN INTO SAME DIRECTION	 80 81 83 82 TURN INTO OPPOSITE DIRECTIONS			(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86 87	 88 89		(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc	 92 BACKING VEH 93 OTHER VEH OR OBJECT			98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

OCCUPANT RELATED

37. Driver Presence in Vehicle: 1
(0) Driver not present
(1) Driver present
(9) Unknown

38. Number of Occupants This Vehicle: 03
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

39. Number of Occupant Forms Submitted: 03

AIR BAG RELATED

40. Is this an AOPS Vehicle? 1
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal: 6
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

42. Air Bag(s) Deployment, Other Than First Seat Frontal: 0
(0) Not equipped with an "other" air bag
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, details unknown
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight: 1,400 0
____ Code weight to nearest 10 kilograms.
(045) Less than 454 kilograms
(612) 6,124 kilograms or more
(999) Unknown
3,077 lbs X 4536 = 1395.7 kgs
Source: [redacted]

44. Vehicle Cargo Weight: 0.010
____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(454) 4,536 kilograms or more
(999) Unknown
25 lbs X .4536 = 11.34 kgs
Source: Interviewee

ROLLOVER DATA

45. Rollover: 00
(00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)
(01-16) Code the number of quarter turns
(17) Rollover, 17 or more quarter turns (specify): _____
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)
(99) Rollover (overturn), details unknown

46. Rollover Initiation Type: 00
(00) No rollover
(01) Trip-over
(02) Flip-over
(03) Turn-over
(04) Climb-over
(05) Fall-over
(06) Bounce-over
(07) Collision with another vehicle
(08) Other rollover initiation type specify): _____
(98) Rollover--end-over-end
(99) Unknown rollover initiation type

47. Location of Rollover Initiation: 0
(0) No rollover
(1) On roadway
(2) On shoulder – paved
(3) On shoulder – unpaved
(4) On roadside or divided trafficway median
(8) Rollover--end-over-end
(9) Unknown

48. Rollover Initiation Object Contacted: 00
(Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied: 0
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify): _____
(6) Non-contact rollover forces (specify): _____
(8) Rollover--end-over-end
(9) Unknown

50. Direction of Initial Roll: 0
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(8) Rollover--end-over-end
(9) Unknown roll direction

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 4

52. Rear Override/Underride (this Vehicle) 0

(0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

Override (see specific CDC)

(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))

(1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify): _____

Underride (see specific CDC)

(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))

(4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify): _____

(7) Medium/heavy truck or bus override (of any configuration)
(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(996) Non-horizontal impact
(997) Noncollision
(998) Impact with object
(999) Unknown

53. Heading Angle For This Vehicle 255

54. Heading Angle For Other Vehicle 260

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown

56. Documentation of Trajectory Data for This Vehicle 1
(0) No
(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted <45 degrees
(4) Tilted ≥45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify): _____
(9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

Delta V Calculated

(01) Reconstruction program-damage only routine
(02) Reconstruction program-damage and trajectory routine
(03) Missing vehicle algorithm

Delta V Not Calculated

(04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstuction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

(05) Rollover
(06) Other non-horizontal forces
(07) Sideswipe type damage
(08) Severe override
(09) Yielding object
(10) Overlapping damage
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify): _____

(98) Other, (specify): _____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V — Highest: 006

6 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

60. Longitudinal Component of Delta V — Highest: + (-) 006

-6 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: _000 means greater than -0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(_999) Unknown

61. Lateral Component of Delta V — Highest: + - 000

0 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: _000 means greater than -0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(_999) Unknown

62. Energy Absorption — Highest: 002.900

2884 Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

63. Impact Speed — Highest: 998

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(998) Trajectory algorithm not run
(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V) 3
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed — Highest: 006

6.4 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

ESTIMATED DELTA V

66. Estimated Highest Delta V (Researcher Determined) 0
    (0) Reconstruction Delta V coded

    Estimated Delta V
    (1) Less than 10 kmph
    (2) ≥ 10 kmph but < 25 kmph
    (3) ≥ 25 kmph but < 40 kmph
    (4) ≥ 40 kmph but < 55 kmph
    (5) ≥ 55 kmph

    Other estimates of damage severity
    (6) Minor
    (7) Moderate
    (8) Severe

    (9) Unknown

INSPECTION TYPE

67. Type of Vehicle Inspection 3
    (0) No inspection
    (1) Vehicle fully repaired-no damage evident
    (2) Partial inspection (specify): _____
    (3) Complete inspection

DELTA V EVENT NUMBER

68. Delta V Event Number 1
    _____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle
    (99) Unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,

OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NA1

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number:

VEHICLE IDENTIFICATION

VIN 1FALP[redacted] Model Year 95

Vehicle Make (specify): FORD Vehicle Model (specify): MUSTANG

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	(R) BC OVER 44cm	ACROSS front Bumper	C6

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	± D
01	Front Bumper	44		146	13.5	4.5	1	1	5	14	
	FREE				13.5	4.5	1	1	4.5	13.5	
	RESULTANT				0	0	0	0	.5	.5	+51
					--						
01	Above bumper									47	
	FREE									43	
	RESULTANT									4	
* 01	Front Bumper	44	.5	58	0	.25	.5	.5			+51

SEE note below

Note: Field measurements subsequently changed since whole front bumper did not sustain indirect damage

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	101.3	inches	x 2.54	=	257.3	cm
Overall Length	181.5	inches	x 2.54	=	461.0	cm
Maximum Width	71.8	inches	x 2.54	=	182.4	cm
Curb Weight	3,077	pounds	x 0.4536	=	1,395.7	kg
Average Track 60.5 59.2	59.85	inches	x 2.54	=	152	cm
Front Overhang	40.2	inches	x 2.54	=	102	cm
Rear Overhang	40.2	inches	x 2.54	=	102	cm
Undeformed End Width	57.5	inches	x 2.54	=	146	cm
Engine Size: cyl/displ.		cc	x 0.001	=	3.8	L
4 passenger, V-6	232	CID	x 0.0164	=	3.8	L

[redacted] Shipping Weight, 5-speed manual 2,952
100
3,052

[redacted] Curb Weight 3,077

SPECIAL CRASH INVESTIGATION ADDENDUM

Submodel Designation: {specify} **Color:** {specify} BLACK **Repair Cost:** $

Transmission: {circle} Automatic | (Manual) **Speed:** 3-speed | 4-speed | (5-speed) | Other:

Steering: {circle} (Power-assisted) | Manual **Type:** (rack-and-pinion) | worm-and-gear | Other
{please describe}:

Brakes: {circle} (Power-assisted) | Manual **Type:** 4-wheel disc | 4-wheel drum | 4-wheel hydraulic
(front disc, rear drum) | Other:

Observed Defects: {specify}

Fleet Type: {circle} (Private vehicle) | Rental vehicle | Leased vehicle | Commercial vehicle | Other
{please describe}:

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	2	2
LF	2	2
RR	2	2
LR	2	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☒ Manual ☐ Automatic

5SPD

END SHIFT ≥ 10 CM

☐ Yes ☒ No

ORIGINAL SPECIFICATIONS

Wheelbase	257	cm
Overall Length	461	cm
Maximum Width	182.	cm
Curb Weight	1,396	kg
Average Track	152	cm
Front Overhang	102	cm
Rear Overhang	102	cm
Undeformed End Width	146	cm
Engine Size: cyl./displ.	V-6 3.8	L

WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

RF ± ___ ___ °
LF ± ___ ___ °
RR ± ___ ___ °
LR ± ___ ___ °

Within ± 5 degrees

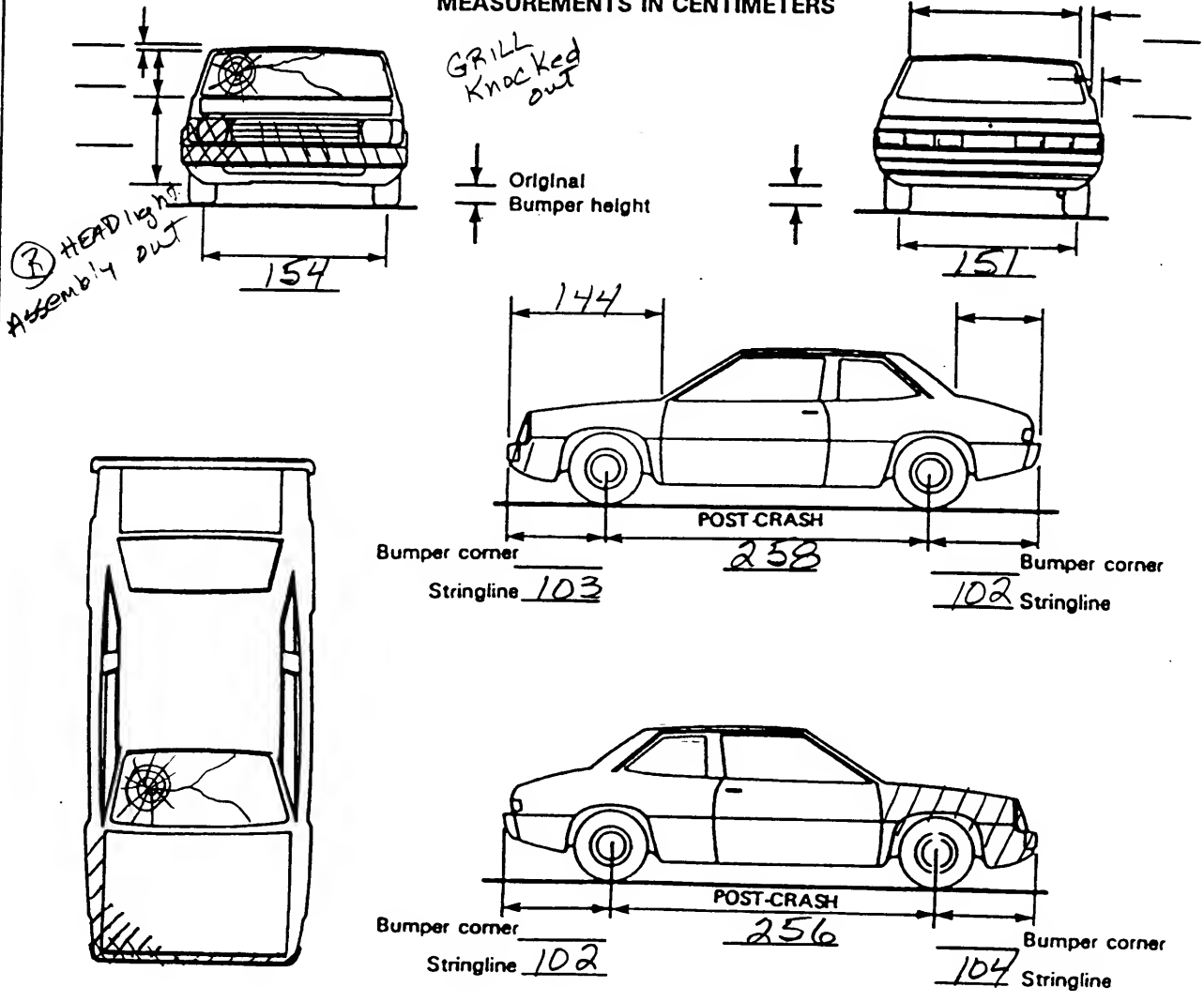
DRIVE WHEELS

☐ FWD ☒ RWD ☐ 4WD

Approximate Cargo Weight

_____ kg

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

FORD Motor Co., The American Road, [redacted] Michigan [redacted]

Type of Body Pass. Cap.	Model	Wheel Base	Dimensions Inches Lt. x Wt. x Ht.	Ship. Wt.	Tax H.P.	Factory List Price	Factory Del'd Price
5-PS 2-dr LX Sedan	BAVSAJ	113.0"	200.3" x 72.7" x 52.5"	3561	41.47	17,445	17,940

Options Thunderbird: Destination Charges-$495; Calif. Emisions System(422)-$95; Leather Seating Surfaces Bucket Seats LX-$490 SC-$615; Anti-lock Brake System(552)(LX only)-$565; Anti-Theft System-$245; Anti-Theft System(18A)-$235; Keyless Entry System(144) LX-$215 SC-$295; Moonroof Power(13B) LX-$740; Cellular Telephone(516)-$530; Traction Assist(553)-$210; Tri Coat Paint-$225; AM/FM Cassette Radio w/cassette-$370 w/JBL Audio System-$500 w/CD-$785; Option Group (1)-$800 (2) LX-$315 SC-$160 (3) LX-$305 SC-$95; Luxury Group LX-$580 SC-$555

FORD Motor Co., The American Road, [redacted] Michigan [redacted]

1995 Aspire FWD 4 cyl 1.3 liter EPFI SOHC Gas Engine(99H)(8 valve)

Bore & Stroke 2.79"x3.29"; Tax H.P. 12.46; SAE H.P. 63@5000; Torque 74@3000; 80.7 cu.in., 1.3 liter

Man. Trans. 5-speed; EPA Mileage Estimate 36/42

4-PS 3-dr H.B. Coupe	T05	90.7	152.8" x 65.7" x 55.6"	1938	12.46	8,440	8,750
4-PS 3-dr H.B. Coupe SE	T07	90.7	152.8" x 65.7" x 55.6"	1938	12.46	9,415	9,725
4-PS 5-dr H.B. Sedan	T06	93.9	155.9" x 65.7" x 55.6"	1986	12.46	9,055	9,365

Auto. Trans. 3-speed; EPA Mileage Estimate 29/34

4-PS 3-dr H.B. Coupe	T05	90.7	152.8" x 65.7" x 55.6"	2000	12.46	9,020	9,330
4-PS 3-dr H.B. Coupe SE	T07	90.7	152.8" x 65.7" x 55.6"	2000	12.46	9,995	10,305
4-PS 5-dr H.B. Sedan	T06	93.9	155.9" x 65.7" x 55.6"	2048	12.46	9,635	9,945

Options Aspire: Destination Charges-$310; Auto. Trans. 3-speed(440)-$580; Calif Emissions(422)-$70; Wheels 13" Al(64U)-$355; Air Conditioning(572)-$825; Anti-Lock Braking System(552)-$565; Rear Window Defroster(57Q)-$160; Interior Decor & Convenience Group(414)-$265; Power Steering(52H)-$250; AM/FM Stereo w/Clock(587)-$300 w/Cassette(589)-$465 SE-$165 w/CD(582)-$625 SE-$325

1995 Contour FWD 4 cyl 2.0 liter DOHC SEFI Gas Engine(993)(16 valve)

Bore & Stroke 3.34"x3.46"; Tax H.P. 17.85; SAE H.P. 125@5500; Torque 130@4000; 121cu.in., 2.0 liter

Man. Trans. 5-speed; EPA Mileage Estimate 24/35

5-PS 4-dr Sedan GL P65	65FA	106.5"	183.9" x 69.1" x 54.5"	2639	17.85	13,310	13,820
5-PS 4-dr Sedan LX P66	66FA	106.5"	183.9" x 69.1" x 54.5"	2681	17.85	13,995	14,505

Auto. Trans. 4-speed; EPA Mileage Estimate

5-PS 4-dr Sedan GL P65	65FA	106.5"	183.9" x 69.1" x 54.5"	2681	17.85	14,155	14,665
5-PS 4-dr Sedan LX P66	66FA	106.5"	183.9" x 69.1" x 54.5"	2723	17.85	14,810	15,320

1995 Contour FWD V6 cyl 2.5 liter DOHC SEFI Gas Engine(99L)(24 valve)

Bore & Stroke 3.24"x3.13"; Tax H.P. 25.19; SAE H.P. 170@6250; Torque 1650@4250, 155cu.in., 2.5 liter

Man. Trans. 5-speed; EPA Mileage Estimate 21/29

5-PS 4-dr Sedan SE P67	67FA	106.5"	183.9" x 69.1" x 54.5"	2855	25.19	15,695	16,205

Auto. Trans. 4-speed; EPA Mileage Estimate

5-PS 4-dr Sedan SE P67	67FA	106.5"	183.9" x 69.1" x 54.5"	2875	25.19	16,510	17,020

Options Contour: Destination Charges-$510; Preferred Equip. Pkgs GL (235A)-$850 (236A)-$1310 (240A)-$2530 LX (237A)-$1350 (238A)-$2245 SE (239A)-$1350; V6 cyl 2.5 liter DOHC SEFI Gas Engine(99L) GL-$1080 LX-$1045 SE-std; Auto. Trans. 4-speed(44t)-$815; Calif Emissions-$95; Wheels (14" Cast AL)(642)-$265; Leather Seating Surfaces LX-$645 SE-$595; Seat (10-way Power)-$330 (6-way Power)-$290; Option Groups (1)(171)-$220 (2)(462) GL-$1030 LX & SE-$950 (3)(603)-$345; Anti-Lock Brakes(552)-$565; Moonroof Power(13B)-$595; Power Door Locks(902)-$345; Power Windows(43R)-$340; Remote Keyless Enry System(143)-$160; Speed Control(525)-$215; AM/FM Stereo w/CD(585) GL-$435 LX & SE-$270 w/cassette(913) GL-$295 LX & SE-$130; Air Conditioning(572)-$780; Defroster Rear Window(57Q)-$160

1995 MUSTANG RWD 6V cyl 3.8 liter SMPFI OHV Gas Engine(994)(12 valve)

Bore & Stroke 3.81"x3.4"; Tax H.P. 38.4; SAE H.P. 145@4000; Torque 215@2500, 232 cu.in., 3.8 liter

Man. Trans. 5-speed; EPA Mileage Estimate 20/30

4-PS 2-dr Coupe P40	63BJ	101.3"	181.5" x 71.8" x 53.0"	2952	38.4	14,530	15,030
4-PS 2-dr Convertible P44	76BH	101.3"	181.5" x 71.8" x 53.2"	3132	38.4	20,995	21495

Auto. Trans. 4-speed

4-PS 2-dr Coupe P40	63BJ	101.3"	181.5" x 71.8" x 53.0"	2999	38.4	15,345	15,845
4-PS 2-dr Convertible P44	76BH	101.3"	181.5" x 71.8" x 53.2"	3179	38.4	21,810	22,310

1995 MUSTANG RWD 8 cyl 5.0 liter SMPFI OHV Gas Engine(99t)(16 valve)

Bore & Stroke 4.0x3.0; Tax H.P. 51.2; SAE H.P. 215@4200; Torque 285@3400; 302 cu.in. 5.0 liter

Man. Trans. 5-speed; EPA Mileage Estimate 17/25

4-PS 2-dr Coupe GTS P42	63BJ	101.3"	181.5" x 71.8" x 53.4"	3153	51.2	16,910	17,410
4-PS 2-dr Coupe GT P42	63BJ	101.3"	181.5" x 71.8" x 53.4"	3153	51.2	18,105	18,605
4-PS 2-dr GT Convertible P45	76BH	101.3"	181.5" x 71.8" x 53.3"	3323	51.2	22,795	23,295

Auto. Trans. 4-speed

4-PS 2-dr Coupe GTS P42	63BJ	101.3"	181.5" x 71.8" x 53.4"	3222	51.2	17,725	18,225
4-PS 2-dr Coupe GT P42	63BJ	101.3"	181.5" x 71.8" x 53.4"	3222	51.2	18,920	19,420
4-PS 2-dr GT Convertible P45	76BH	101.3"	181.5" x 71.8" x 53.3"	3389	51.2	23,610	24,110

Options Mustang: Destination Charges-$500; Auto. Trans. 4-speed-$815; Preferred Equip. Pkg (241A) Coupe-$640 (243A) Coupe-$2030 Convertible-$1625 (248A)-$640 (249A)-$1615; Calif Emission(422)-$95; Wheels (15"

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover—end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify):

_____

- (36) Noncollision injury
- (38) Other noncollision (specify):

_____

- (39) Noncollision — details unknown

Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):_____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):

_____

- (69) Unknown fixed object

Collision with Nonfixed Object
- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance

_____

- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify):

_____

- (89) Unknown nonfixed object

- (98) Other event (specify):

_____

- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02			E	R	E	W	01

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. 01	5. 02	6. 12	7. F	8. R	9. E	10. W	11. 01

Second Highest Delta "V"

12.	13.	14.	15.	16.	17.	18.	19.

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
058	000	000	001	001			+ 051

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
							+

26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) 146
____ Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

27. Direct Damage Width (For highest severity impact) 044
____ Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

28. Original Wheelbase 257
____ Code to the nearest centimeter
(650) 650 centimeters or more
(999) Unknown
____.__ inches X 2.54 = ___ centimeters

29. Original Average Track Width 152
____ Code to the nearest centimeter
(185) 185 centimeters or more
(999) Unknown
____.__ inches X 2.54 = ___ centimeters

30. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

31. Researcher's Assessment of Vehicle Disposition 0
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications (specify): _____
_____
_____
(Include photograph of CERTIFICATION PLACARD in case report)
(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence 0
(0) No fire

Yes, fire occurred
(1) Minor
(2) Major
(9) Unknown

34. Origin of Fire 0
(0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify):
_____
(9) Unknown

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap 3

36. Location of Fuel Tank-2 Filler Cap 0
(0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on left side plane
(3) Aft of center of the rear wheels (rear axle) on right side plane
(4) Forward of center of the rear wheels (rear axle) on left side plane
(5) Forward of center of the rear wheels (rear axle) on right side plane
(6) Over the center of the rear wheels (rear axle) on left side plane
(7) Over the center of the rear wheels (rear axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1 1

38. Type of Fuel Tank-2 0
(0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1 1

40. Location of Fuel Tank-2 0
(0) No fuel tank
(1) Aft of center of the rear wheels (rear axle) centered
(2) Aft of center of the rear wheels (rear axle) left side
(3) Aft of center of the rear wheels (rear axle) right side
(4) Forward of center of the rear wheels (rear axle) centered
(5) Forward of center of the rear wheels (rear axle) left side
(6) Forward of center of the rear wheels (rear axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1 1

42. Damage to Fuel Tank-2 0
(0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 0
(0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage
(2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify):_____
(9) Unknown

45. Fuel Type-1 01

46. Fuel Type-2 00

Single Fuel Type
(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify):
_____

Electric Powered or Electric/Solar Powered Vehicles
(10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify):_____

(98) Other Hybrid (specify):
_____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0
(0) No (one or two tanks only)

Yes - More Than Two Tanks
(1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location):
_____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 01

INTEGRITY

4. Passenger Compartment Integrity: 00
(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (back door)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window (backlight)
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window (side window and backlight)
(12) Windshield and side window
(13) Door and side window
(98) Other combination of above (specify): _____
(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify): _____
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify): _____
(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 4 17. RF 4 18. LR 4 19. RR 4
20. BL 4 21. Roof 0 22. Other 0

(0) No glazing
(1) AS-1 — Laminated
(2) AS-2 — Tempered
(3) AS-3 — Tempered-tinted (original)
(4) AS-2 — Tempered-with after market tint
(5) AS-3 — Tempered-tinted (with additional after market tint)
(6) AS-14 — Glass/Plastic
(7) Glazing removed prior to accident
(8) Other (specify): _____
(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 1 25. RF 1 26. LR 1 27. RR 1
28. BL 1 29. Roof 0 30. Other 0

(0) No glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(7) Glazing removed prior to accident
(9) Unknown

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 1 34. LR 1 35. RR 1
36. BL 1 37. Roof 0 38. Other 0

(0) No glazing
(1) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 3 40. LF 1 41. RF 1 42. LR 1 43. RR 1
44. BL 1 45. Roof 0 46. Other 0

(0) No glazing
(1) No occupant contact to glazing
(2) Glazing contacted by occupant but no glazing damage
(3) Glazing in place and cracked by occupant contact
(4) Glazing in place and holed by occupant contact
(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(6) Glazing out-of-place by occupant contact and holed by occupant contact
(7) Glazing removed prior to accident
(8) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	–	DAMAGE VALUE	=	DEFORMATION
	–		=	
No	–	DEFORMATION	=	
	–		=	
	–		=	

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47.___ ___	48.___ ___	49.___	50.___
2nd	51.___ ___	52.___ ___	53.___	54.___
3rd	55.___ ___	56.___ ___	57.___	58.___
4th	59.___ ___	60.___ ___	61.___	62.___
5th	63.___ ___	64.___ ___	65.___	66.___
6th	67.___ ___	68.___ ___	69.___	70.___
7th	71.___ ___	72.___ ___	73.___	74.___
8th	75.___ ___	76.___ ___	77.___	78.___
9th	79.___ ___	80.___ ___	81.___	82.___
10th	83.___ ___	84.___ ___	85.___	86.___

LOCATION OF INTRUSION

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____
- (99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components
- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

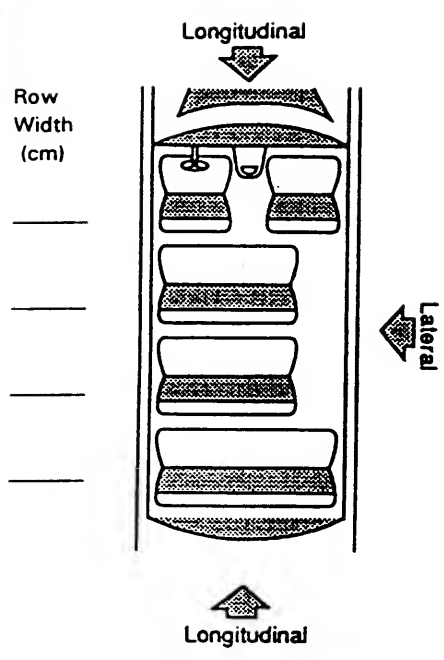
- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

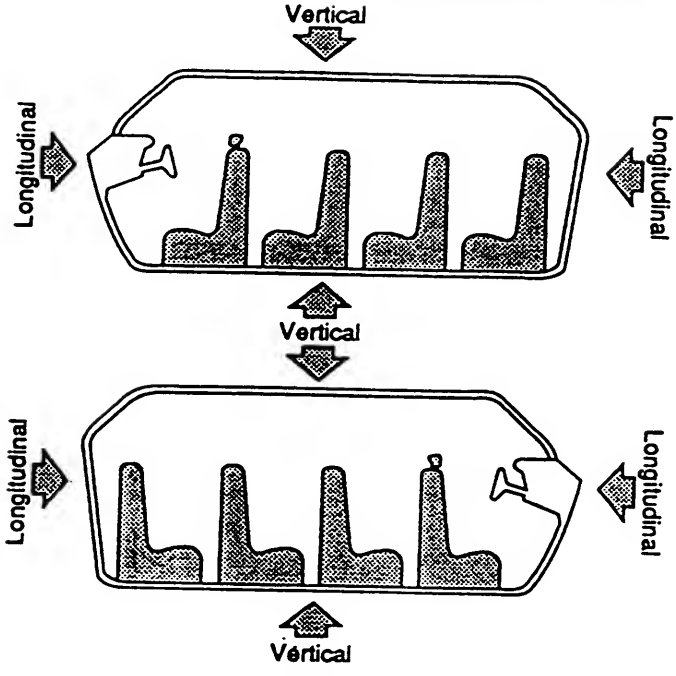
DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS





LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters) COMPARISON VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
			–		=		
	NO INTRUSIONS						
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

Document no more than the 15 most severe intrusions

STEERING COLUMN

87. Steering Column Type — 2
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify): _____
(9) Unknown

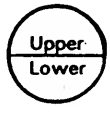
88. Tilt Steering Column Adjustment — 4
(0) No tilt steering column
(1) Full up
(2) Between full up and center
(3) Center
(4) Between center and full down
(5) Full down
(9) Unknown

89. Telescoping Steering Column Adjustment — 0
(0) No telescoping steering column
(1) Full back
(2) Between full back and midpoint
(3) Midpoint
(4) Between midpoint and full forward
(5) Full forward
(9) Unknown

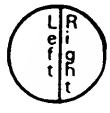
90. Steering Rim/Spoke Deformation — 00
____Code actual measured deformation to the nearest centimeter
(00) No steering rim deformation
(01-14) Actual measured value in centimeters
(15) 15 centimeters or more
(98) Observed deformation cannot be measured
(99) Unknown

91. Location of Steering Rim/Spoke Deformation — 00
(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D



Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke



(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

92. Odometer Reading — 079,000
____ kilometers
Code to the nearest 1,000 kilometers
(000) No odometer
(001) Less than 1,500 kilometers
(500) 499,500 kilometers or more
(999) Unknown
49.000 miles X 1.6093 = 78,858 kilometers

Source: ODOMETER

93. Instrument Panel Damage from Occupant Contact? — 0
(0) No
(1) Yes
(9) Unknown

94. Type of Knee Bolster Covering — 2
(0) No knee bolster
(1) Padded
(2) Rigid plastic
(8) Other (specify): _____
(9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? — 1
(0) No knee bolster
(1) No deformation
(2) Yes - deformation
(9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? — 1
(0) No glove compartment door
(1) No - door did not open
(2) Yes - door opened
(9) Unknown

97. Adaptive (Assistive) Driving Equipment — 0
(0) No adaptive driving equipment
(1) Adaptive driving equipment installed
(Check all that apply.)
[ ] Hand controls for braking/acceleration
[ ] Steering control devices (attached to OEM steering wheel
[ ] Steering knob attached to steering wheel
[ ] Low effort power steering (unit or device)
[ ] Replacement steering wheel (i.e., reduced diameter)
[ ] Joy-stick steering controls
[ ] Wheelchair tie-downs
[ ] Modification to seat belts (specify): _____
[ ] Additional or relocated switches (specify): _____
[ ] Raised roof
[ ] Wall-mounted head rest (used behind wheelchair)
[ ] Other adaptive device (specify): _____
(9) Unknown

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data ***for the driver and first seat passenger*** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	1
B-Flaps open at tear points?	2	2
C-Flaps damaged?	1	1
D-Air bag damaged?	01	01
E-Source of air bag damage	01	01
F-Air bag tethered?	2	1
G-Air bag have vent ports?	2	2
H-Other occupant contact air bag?	1	1
I-Occupant wearing eyewear?	1	1

A-Type of Air Bag
- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?
- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?
- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage
- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify): _____
- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

E-Source of Air Bag Damage
- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify): _____
- (03) Object carried by occupant, (specify): _____
- (04) Adaptive/assistive controls, (specify): _____
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): _____
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): 2, 3" tethers
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

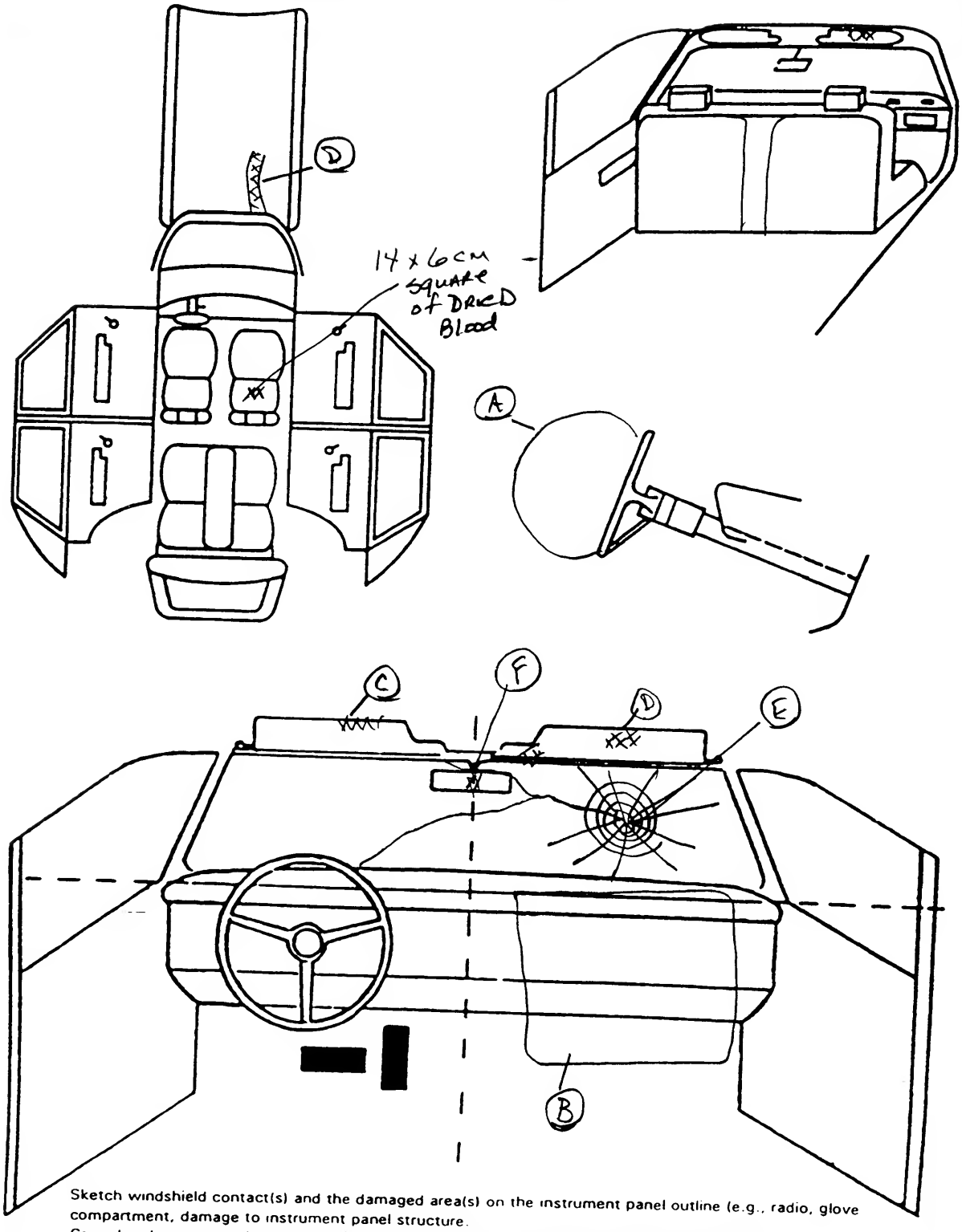
G-Did The Air Bag Have Vent Ports?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): 2 Driver 1 RF
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	170	1		oil smears to SIDES	1
B	180	2		OIL & SKIN	1
C	003			White transfer	3
D	003/205			white transfer	3
E *	001	2		SPIDER WEB/ & SKIN	1
F	002			tilted by AIR bag	N/A
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
(001) Windshield
(002) Mirror
(003) Sunvisor
(004) Steering wheel rim
(005) Steering wheel hub/spoke
(006) Steering wheel (combination of codes 004 and 005)
(007) Steering column,transmission selector lever, other attachment
(008) Cellular telephone or CB radio
(009) Add on equipment(e.g., tapedeck, air conditioner)
(010) Left instrument panel and below
(011) Center instrument panel and below
(012) Right instrument panel and below
(013) Glove compartment door
(014) Knee bolster
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
(017) Windshield reinforced by exterior object, (specify): _____
(019) Other front object (specify): _____

LEFT SIDE
(051) Left side interior surface, excluding hardware or armrests
(052) Left side hardware or armrest
(053) Left A (A1/A2)-pillar
(054) Left B-pillar
(055) Other left pillar (specify): _____
(056) Left side window glass
(057) Left side window frame
(058) Left side window sill
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(060) Other left side object (specify): _____

RIGHT SIDE
(101) Right side interior surface, excluding hardware or armrests
(102) Right side hardware or armrest
(103) Right A (A1/A2)-pillar
(104) Right B-pillar
(105) Other right pillar (specify): _____
(106) Right side window glass
(107) Right side window frame
(108) Right side window sill
(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(110) Other right side object (specify): _____

INTERIOR
(151) Seat, back support
(152) Belt restraint webbing/buckle
(153) Belt restraint B-pillar or door frame attachment point
(154) Other restraint system component (specify): _____
(155) Head restraint system
(160) Other occupants (specify): _____
(161) Interior loose objects
(162) Child safety seat (specify): _____
(163) Other interior object (specify): _____

AIR BAG
(170) Air bag-driver side
(175) Air bag compartment cover-driver side
(180) Air bag-passenger side
(185) Air bag compartment cover-passenger side
(190) Other air bag (specify) _____
(195) Other air bag compartment cover (specify) _____

ROOF
(201) Front header
(202) Rear header
(203) Roof left side rail
(204) Roof right side rail
(205) Roof or convertible top

FLOOR
(251) Floor (including toe pan)
(252) Floor or console mounted transmission lever, including console
(253) Parking brake handle
(254) Foot controls including parking brake

REAR
(301) Backlight (rear window)
(302) Backlight storage rack, door, etc.
(303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT
(401) Hand controls for braking/acceleration
(402) Steering control devices (attached to OEM steering wheel)
(403) Steering knob attached to steering wheel
(405) Replacement steering wheel (i.e., reduced diameter)
(406) Joy stick steering controls
(407) Wheelchair tie-downs
(408) Modification to seat belts, (specify): _____
(409) Additional or relocated switches, (specify): _____
(410) Raised roof
(411) Wall mounted head rest (used behind wheel chair)
(412) Other adaptive device (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT
(1) Certain
(2) Probable
(3) Possible
(9) Unknown

* NO oil SMUDGE found on windshield just spider web & AB exhaust PARTICLES

Police found HAIR & SKIN but removed for EVIDENCE

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	OtherAir Bag
FIRST	Availability/Function	1	1	0
	Deployment	1	1	0
	Failure	1	1	0

Air Bag System Availability/Function
(0) Not equipped/not available
(1) Air bag

Non-functional
(2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment (This Occupant Position)
(0) Not equipped/not available
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, accident sequence undetermined
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Are There Indications of Air Bag System Failure? (This Occupant Position)
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	A-Availability/Function	0	0
	B-Use	0	0
	C-Type	0	0
	D-Proper Use	0	0
	E-Failure Modes	0	0

A-Automatic (Passive) Belt System Availability/Function
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

B-Automatic (Passive) Belt System Use
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

C-Automatic (Passive) Belt System Type
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

D-Proper Use of Automatic (Passive) Belt System
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

E-Automatic (Passive) Belt Failure Modes During Accident
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4	0	4
	B-Evidence of usage	04		04
	C-Used in this crash?	04		00
	D-Proper Use	1		0
	E-Failure Modes	1		0
	F-Anchorage Adjustment	1		1
SECOND	A-Availability	4		4
	B-Evidence of usage	04		04
	C-Used in this crash?	00		04
	D-Proper Use	0		1
	E-Failure Modes	0		1
	F-Anchorage Adjustment	1		1
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

A-Manual (Active) Belt System Availability
- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed
- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

B/C-Manual (Active) Belt System Use
- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): _____
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

D-Proper Use of Manual (Active) Belts
- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly
- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____
- (9) Unknown

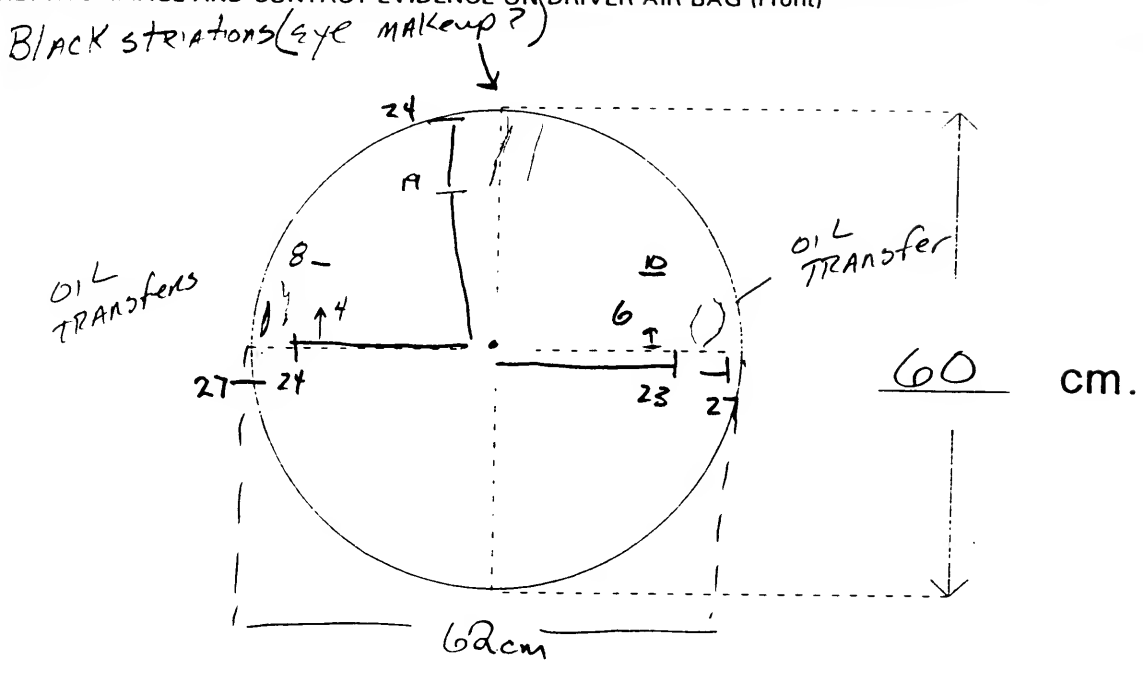
E-Manual (Active) Belt Failure Modes During Accident
- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment
- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

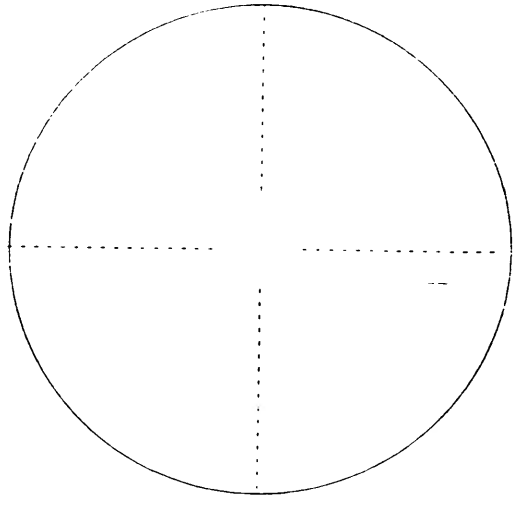
Adjustable shoulder Belt Upper Anchorage
- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

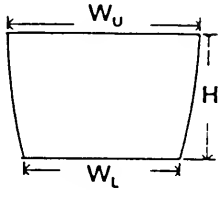


DRIVER AIR BAG SKETCHES (Cont'd)

3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____

height (H) _____

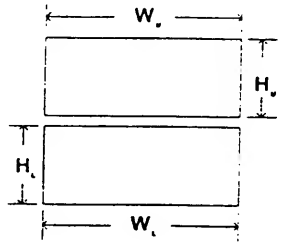


4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap b. Lower Flap

width (W_U) 15 width (W_L) 14

height (H_U) 8 height (H_L) 5

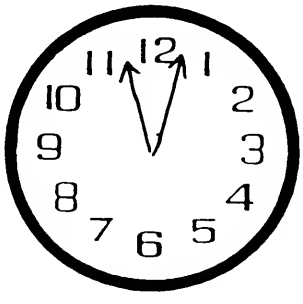


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

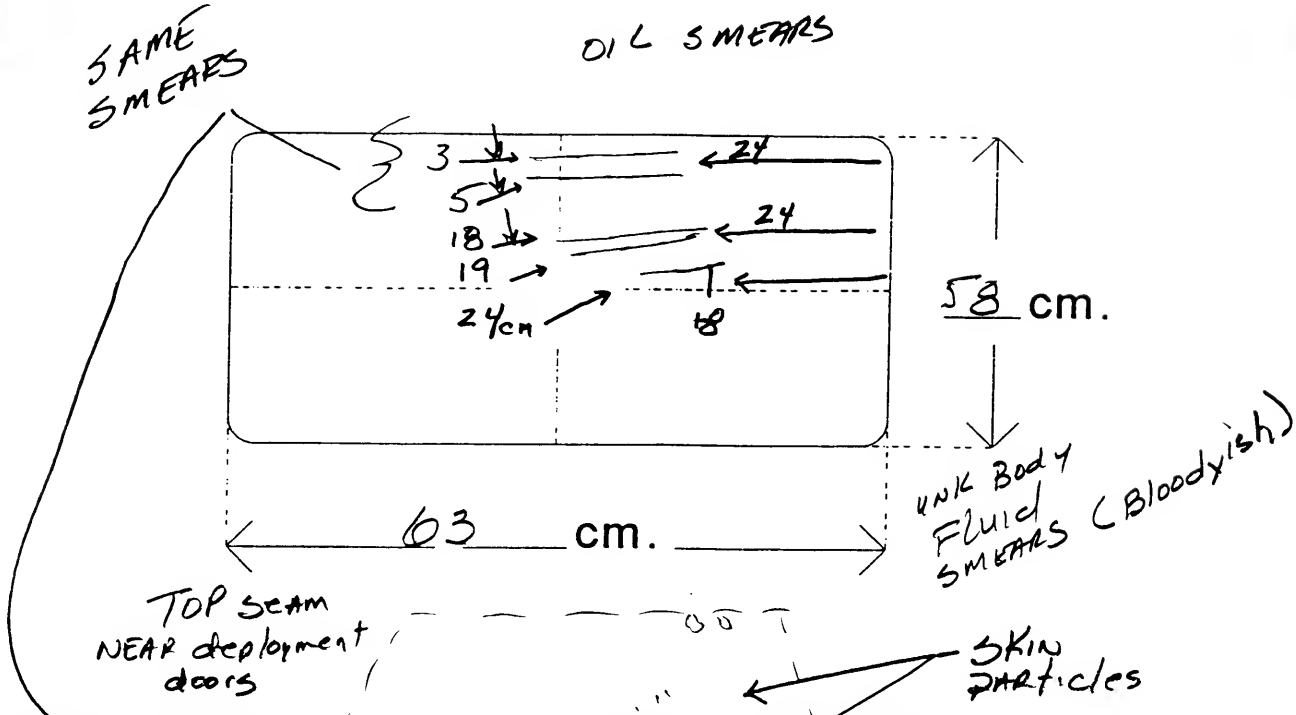
11^{30} & 12^{30}



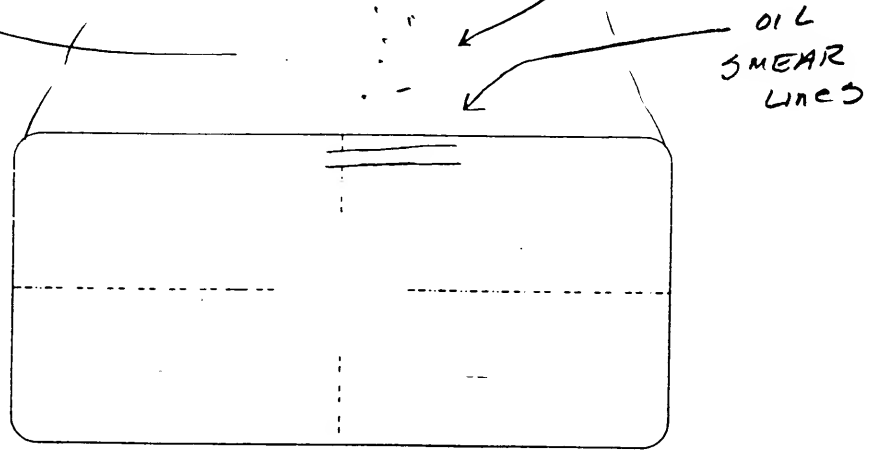
Both vent
Diam 2cm's

PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back) TOP

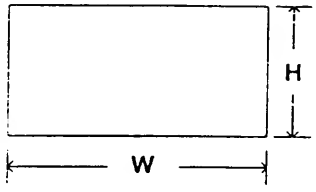


PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____

height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

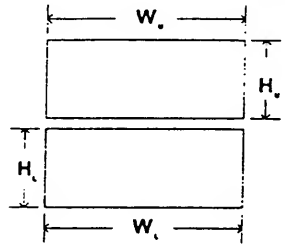
width (W_U) _____

height (H_U) _____

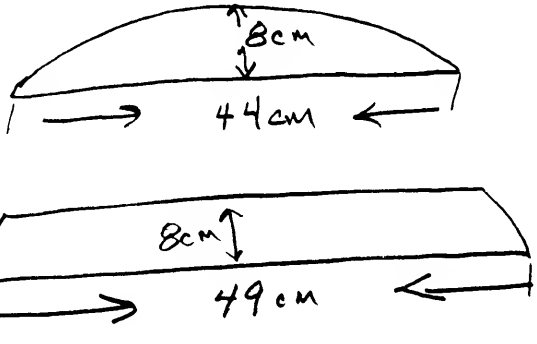
b. Lower Flap

width (W_L) _____

height (H_L) _____

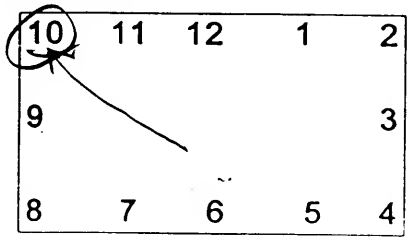


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE



6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



1 VENT PORT
5 cm DIAM

Distance from
EDge to flap 8cm

"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON *"OTHER"* AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON *"OTHER"* AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	3		3
	B-Seat Type	02		02
	C-Seat Orientation	1		1
	D-Seat Track Position	5-6		6
	E-Seat Back Incline Pre/Post Impact	14		14
	F-Seat Performance	1		1
SECOND	A-Head Restraint Type/Damage	1		1
	B-Seat Type	07		07
	C-Seat Orientation	1		1
	D-Seat Track Position	1		1
	E-Seat Back Incline Pre/Post Impact	01		01
	F-Seat Performance	1		1
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE

(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

DRIVER seat track - from BASE of backseat to base of DRIVER seat 25cm

PASS. seat track - from Base of backseat to base of pass seat 22cm

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat		NONE				
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat
   - (0) No child safety seat
   - (1) Infant seat
   - (2) Toddler seat
   - (3) Convertible seat
   - (4) Booster seat
   - (7) Other type child safety seat (specify): _____
   - (8) Unknown child safety seat type
   - (9) Unknown if child safety seat used

2. Child Safety Seat Orientation
   - (00) No child safety seat

   Designed for Rear Facing for This Age/Weight
   - (01) Rear facing
   - (02) Forward facing
   - (08) Other orientation (specify): _____
   - (09) Unknown orientation

   Designed for Forward Facing for This Age/Weight
   - (11) Rear facing
   - (12) Forward facing
   - (18) Other orientation (specify): _____
   - (19) Unknown orientation

   Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
   - (21) Rear facing
   - (22) Forward facing
   - (28) Other orientation (specify): _____
   - (29) Unknown orientation

   (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage
   Note: Options Below Are Used for Variables 3-5.
   - (00) No child safety seat

   Not Designed with Harness/Shield/Tether
   - (01) After market harness/shield/tether added, not used
   - (02) After market harness/shield/tether used
   - (03) Child safety seat used, but no after market harness/shield/tether added
   - (09) Unknown if harness/shield/tether added or used

   Designed With Harness/Shield/Tether
   - (11) Harness/shield/tether not used
   - (12) Harness/shield/tether used
   - (19) Unknown if harness/shield/tether used

   Unknown If Designed With Harness/Shield/Tether
   - (21) Harness/shield/tether not used
   - (22) Harness/shield/tether used
   - (29) Unknown if harness/shield/tether used

   (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
   (Specify make/model and occupant number)

   _____

   _____

   _____

   _____

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position
(0) No head restraints
(1) Integral — no damage
(2) Integral — damaged during accident
(3) Adjustable — no damage
(4) Adjustable — damaged during accident
(5) Add-on — no damage
(6) Add-on — damaged during accident
(8) Other Specify):_____
(9) Unknown

B-Seat Type (this Occupant Position)
(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Box mounted seat (i.e., van type)
(10) Other seat type (specify):
_____
(99) Unknown

C-Seat Orientation (this Occupant Position)
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):
_____
(9) Unknown

D-Seat Track Adjusted Position Prior To Impact
(0) Occupant not seated or no seat
(1) Non-adjustable seat track

Adjustable Seat Track
(2) Seat at forward most track position
(3) Seat between forward most and middle track positions
(4) Seat at middle track position
(5) Seat between middle and rear most track positions
(6) Seat at rear most track position
(9) Unknown

E-Seat Back Incline Prior and Post Impact
(00) Occupant not seated or no seat
(01) Not adjustable

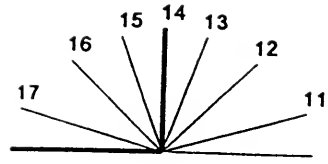
Upright prior to impact
(11) Moved to completely rearward position
(12) Moved to rearward midrange position
(13) Moved to slightly rearward position
(14) Retained pre-impact position
(15) Moved to slightly forward position
(16) Moved to forward midrange position
(17) Moved to completely forward position

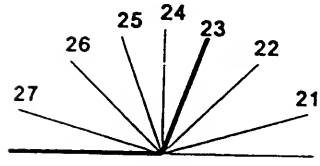
Slightly reclined prior to impact
(21) Moved to completely rearward position
(22) Moved to rearward midrange position
(23) Retained pre-impact postion
(24) Moved to upright position
(25) Moved to slightly forward position
(26) Moved to forward midrange position
(27) Moved to completely forward position

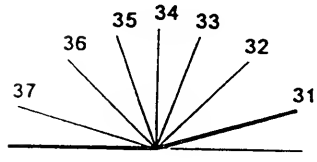
Completely reclined prior to impact
(31) Retained pre-impact position
(32) Moved to rearward midrange position
(33) Moved to slightly rearward position
(34) Moved to upright position
(35) Moved to slightly forward position
(36) Moved to forward midrange position
(37) Moved to completely forward position

(99) Unknown

F-Seat Performance (this Occupant Position)
(0) Occupant not seated or no seat
(1) No seat performance failure(s)
(2) Seat adjusters failed
(3) Seat back folding locks or "seat back" failed (specify):
_____
(4) Seat tracks/anchors failed
(5) Deformed by impact of occupant
(6) Deformed by passenger compartment intrusion (specify):_____
(7) Combination of above (specify):
_____
(8) Other (specify):
_____
(9) Unknown







Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [X] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [X] Yes [ ]

Describe entrapment mechanism: _____

Component(s): _____

(Note on vehicle interior sketch)

NASS CDS VEHICLE FORMS: VEHICLE #2

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year: 91
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): FORD — 12
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): EXPLORER — 401
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type: 14
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number: 1FMDU32X7MU_____
   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
   Left justify; Slash zeros and letter Z (Ø and Z)
   No VIN—Code all zeros
   Unknown—Code all nines

9. Vehicle Special Use (This Trip): 0
   (0) No special use
   (1) Taxi
   (2) Vehicle used as school bus
   (3) Vehicle used as other bus
   (4) Military
   (5) Police
   (6) Ambulance
   (7) Fire truck or car
   (8) Other (specify): _____
   (9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition: 0
    (0) Not towed due to vehicle damage
    (1) Towed due to vehicle damage
    (9) Unknown

11. Police Reported Travel Speed: 000
    Code to the nearest kmph (NOTE: 000 means less than 0.5 kmph)
    (160) 159.5 kmph and above
    (999) Unknown

    ___ mph X 1.6093 = ___ kmph

12. Speed Limit: 040
    (000) No statutory limit
    Code posted or statutory speed limit in kmph
    (999) Unknown

    25 mph X 1.6093 = 40 kmph

13. Police Reported Alcohol Presence For Driver: 0
    (0) No alcohol present
    (1) Yes alcohol present
    (7) Not reported
    (8) No driver present
    (9) Unknown

14. Alcohol Test Result For Driver: 00
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown

    Source: INV. officer

15. Police Reported Other Drug Presence For Driver: 0
    (0) No other drug(s) present
    (1) Yes other drug(s) present
    (7) Not reported
    (8) No driver present
    (9) Unknown

16. Other Drug Specimen Test Result For Driver: 0
    (0) No specimen test given
    (1) Drug(s) not found in specimen
    (2) Drug(s) found in specimen, (specify): _____
    (3) Specimen test given, results unknown or not obtained
    (8) No driver present
    (9) Unknown if specimen test given

17. Driver's Zip Code: [redacted]
    (00001) Driver not a resident of U.S. or territories
    _____ Code actual 5-digit zip code
    (99998) No driver present
    (99999) Unknown

18. Driver's Race/Ethnic Origin: 1
    (1) White (non-Hispanic)
    (2) Black (non-Hispanic)
    (3) White (Hispanic)
    (4) Black (Hispanic)
    (5) American Indian, Eskimo or Aleut
    (6) Asian or Pacific Islander
    (7) Other (specify): _____
    (8) No driver present
    (9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

(01) Convertible (excludes sun-roof, t-bar)
(02) 2-door sedan, hardtop, coupe
(03) 3-door/2-door hatchback
(04) 4-door sedan, hardtop
(05) 5-door/4-door hatchback
(06) Station wagon (excluding van and truck based)
(07) Hatchback, number of doors unknown
(08) Other automobile type (specify):

_____

(09) Unknown automobile type

Automobile Derivatives

(10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
(11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
(12) Large limousine - more than four side doors or stretched chassis
(13) Three-wheel automobile or automobile derivative

Utility Vehicles (≤ 4,536 kgs GVWR)

(14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
(15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
(16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
(19) Utility, unknown body type

Van Based Light Trucks (≤ 4,536 kgs GVWR)

(20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
(21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
(22) Step van or walk-in van (≤ 4,536 kgs GVWR)
(23) Van based motorhome (≤ 4,536 kgs GVWR)
(24) Van based school bus (≤ 4,536 kgs GVWR)
(25) Van based other bus (≤ 4,536 kgs GVWR)
(28) Other van type (Hi-Cube Van, Kary) (specify):

_____

(29) Unknown van type

Light Conventional Trucks (Pickup style cab, ≤ 4,536 kgs GVWR)

(30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10 , T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
(31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
(32) Pickup with slide-in camper
(33) Convertible pickup
(39) Unknown pickup style light conventional truck type

Other Light Trucks (≤ 4,536 kgs GVWR)

(40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
(41) Truck based panel
(42) Light truck based motorhome (chassis mounted)
(45) Other light conventional truck type
(48) Unknown light truck type
(49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

(50) School bus (designed to carry students, not cross country or transit)
(58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):

_____

(59) Unknown bus type

Medium/Heavy Trucks (> 4,536 kgs GVWR)

(60) Step van (> 4,536 kgs GVWR)
(61) Single unit straight truck (4,536 kgs < GVWR ≤ 8,845 kgs)
(62) Single unit straight truck (8,845 kgs < GVWR ≤ 11,793 kgs)
(63) Single unit straight truck (> 11,793 kgs GVWR)
(64) Single unit straight truck, GVWR unknown
(65) Medium/heavy truck based motorhome
(67) Truck-tractor with no cargo trailer
(68) Truck-tractor pulling one trailer
(69) Truck-tractor pulling two or more trailers
(70) Truck-tractor (unknown if pulling trailer)
(78) Unknown medium/heavy truck type
(79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

(80) Motorcycle
(81) Moped (motorized bicycle)
(82) Three-wheel motorcycle or moped
(88) Other motored cycle (minibike, motorscooter) (specify): _____
(89) Unknown motored cycle type

Other Vehicles

(90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
(91) Snowmobile
(92) Farm equipment other than trucks
(93) Construction equipment other than trucks
(97) Other vehicle type
(99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction — 1
(0) Non-interchange area and non-junction
(1) Interchange area related

Non-Interchange junctions
(2) Intersection related
(3) Driveway, alley access related
(4) Other junction (specify)
_____
(5) Unknown type of junction

(9) Unknown

20. Trafficway Flow — 0
(0) Not physically divided (two way traffic)
(1) Divided trafficway-median strip without positive barrier
(2) Divided trafficway-median strip with positive barrier
(3) One way traffic
(9) Unknown

21. Number Of Travel Lanes — 3
(1) One
(2) Two
(3) Three
(4) Four
(5) Five
(6) Six
(7) Seven or more
(9) Unknown

22. Roadway Alignment — 1
(1) Straight
(2) Curve right
(3) Curve left
(9) Unknown

23. Roadway Profile — -.4% — 1
(1) Level
(2) Uphill grade (>2%)
(3) Hill crest
(4) Downhill grade (>2%)
(5) Sag
(9) Unknown

24. Roadway Surface Type — 2
(1) Concrete
(2) Bituminous (asphalt)
(3) Brick or block
(4) Slag, gravel, or stone
(5) Dirt
(8) Other (specify): _____
(9) Unknown

25. Roadway Surface Condition — 1
(1) Dry
(2) Wet
(3) Snow or slush
(4) Ice
(5) Sand, dirt, or oil
(8) Other (specify): _____
(9) Unknown

26. Light Conditions — 1
(1) Daylight
(2) Dark
(3) Dark, but lighted
(4) Dawn
(5) Dusk
(9) Unknown

27. Atmospheric Conditions — 0
(0) No adverse atmospheric-related driving conditions
(1) Rain
(2) Sleet/hail
(3) Snow
(4) Fog
(5) Rain and fog
(6) Sleet and fog
(7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify):
_____
(9) Unknown

28. Traffic Control Device — 1
(0) No traffic control(s)
(1) Traffic control signal (not RR crossing)

Regulatory
(2) Stop sign
(3) Yield sign
(4) School zone sign
(5) Other regulatory sign (specify):
_____
(6) Warning sign (not RR crossing)
(7) Unknown sign
(8) Miscellaneous/other controls including RR controls (specify):
_____
(9) Unknown

29. Traffic Control Device Functioning — 2
(0) No traffic control device
(1) Traffic control device not functioning (specify):
_____
(2) Traffic control device functioning properly
(9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 01
(00) No driver present
(01) Attentive or not distracted
(02) Looked but did not see

Distractions
(03) By other occupant(s), (specify): _____
(04) By moving object in vehicle (specify): _____
(05) While talking or listening to cellular phone (specify location and type of phone): _____
(06) While dialing cellular phone (specify location and type of phone): _____
(07) While adjusting climate controls
(08) While adjusting radio, cassette, CD (specify): _____
(09) While using other device/controls integral to vehicle (specify): _____
(10) While using or reaching for device/object brought into vehicle (specify): _____
(11) Sleepy or fell asleep
(12) Distracted by outside person, object, or event (specify): _____
(13) Eating or drinking
(14) Smoking related
(97) Distracted/inattentive, details unknown
(98) Other, distraction (specify): _____
(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 05
(00) No driver present
(01) Going straight
(02) Decelerating in traffic lane
(03) Accelerating in traffic lane
(04) Starting in traffic lane
(05) Stopped in traffic lane
(06) Passing or overtaking another vehicle
(07) Disabled or parked in travel lane
(08) Leaving a parking position
(09) Entering a parking position
(10) Turning right
(11) Turning left
(12) Making a U-turn
(13) Backing up (other than for parking position)
(14) Negotiating a curve
(15) Changing lanes
(16) Merging
(17) Successful avoidance maneuver to a previous critical event
(97) Other (specify): _____
(99) Unknown

32. Critical Precrash Event 52

THIS VEHICLE LOSS OF CONTROL DUE TO:
(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

THIS VEHICLE TRAVELLING
(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(18) This vehicle decelerating
(19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE
(50) Other vehicle stopped
(51) Traveling in same direction with lower steady speed
(52) Traveling in same direction while decelerating
(53) Traveling in same direction with higher speed
(54) Traveling in opposite direction
(55) In crossover
(56) Backing
(59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE
(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST
(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway (specify): _____
(84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

OBJECT OR ANIMAL
(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location
(98) Other critical precrash event (specify): _____
(99) Unknown

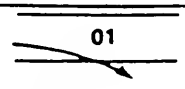
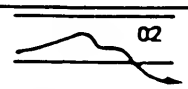
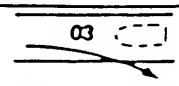
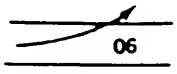
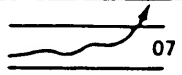
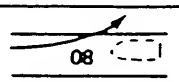
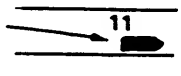
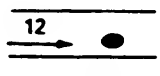
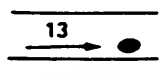
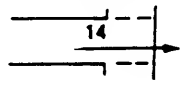
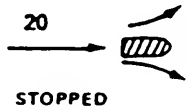
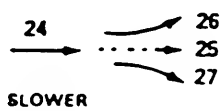
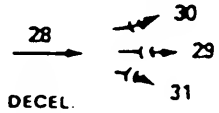
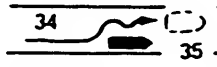
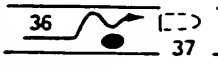
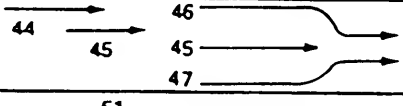
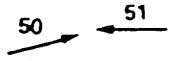
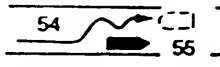
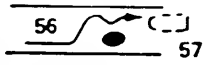
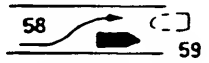
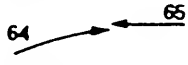
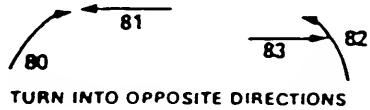
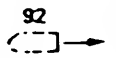
33. Attempted Avoidance Maneuver 01
(00) No driver present
(01) No avoidance maneuver
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(98) Other action (specify): _____
(99) Unknown

34. Pre-Impact Stability 1
(0) No driver present
(1) Tracking
(2) Skidding longitudinally—rotation less than 30 degrees
(3) Skidding laterally—clockwise rotation
(4) Skidding laterally—counterclockwise rotation
(7) Other vehicle loss-of-control (specify): _____
(9) Precrash stability unknown

35. Pre-Impact Location 1
(0) No driver present
(1) Stayed in original travel lane
(2) Stayed on roadway but left original travel lane
(3) Stayed on roadway, not known if left original travel lane
(4) Departed roadway
(5) Remained off roadway
(6) Returned to roadway
(7) Entered roadway
(9) Unknown

36. Accident Type 21
(Note: Applicable codes on back of this page)
(00) No impact
Code the number of the diagram that best describes the accident circumstance
(98) Other accident type (specify): _____
(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 22 21 23 STOPPED 21, 22, 23	 24 26 25 27 SLOWER 25, 26, 27	 28 30 29 31 DECEL. 29, 30, 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 35 CONTROL/ TRACTION LOSS	 36 37 CONTROL/ TRACTION LOSS	 38 39 AVOID COLLISION WITH VEH.	 40 41 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 45 46 45 47			(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On	 50 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER		(EACH • 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 55 CONTROL/ TRACTION LOSS	 56 57 CONTROL/ TRACTION LOSS	 58 59 AVOID COLLISION WITH VEH	 60 61 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER		(EACH • 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 69 INITIAL OPPOSITE DIRECTIONS	 71 70 73 72 INITIAL SAME DIRECTIONS			(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN
	K Turn Into Path	 76 77 78 79 TURN INTO SAME DIRECTION	 80 81 83 82 TURN INTO OPPOSITE DIRECTIONS			(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86 87 88 89			(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc	 92 BACKING VEH 93 OTHER VEH OR OBJECT			98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

OCCUPANT RELATED

37. Driver Presence in Vehicle: 1
(0) Driver not present
(1) Driver present
(9) Unknown

38. Number of Occupants This Vehicle: 05
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

39. Number of Occupant Forms Submitted: 00

AIR BAG RELATED

40. Is this an AOPS Vehicle? 0
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal 0
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
(0) Not equipped with an "other" air bag
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, details unknown
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight: 1730
____ Code weight to nearest 10 kilograms.
(045) Less than 454 kilograms
(612) 6,124 kilograms or more
(999) Unknown
3824 lbs X 4536 = 1734.6 kgs
Source: [redacted]

44. Vehicle Cargo Weight: 0.000
____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(454) 4,536 kilograms or more
(999) Unknown
10 lbs X .4536 = 4.54 kgs
Source: Interviewee

ROLLOVER DATA

45. Rollover: 00
(00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)
(01-16) Code the number of quarter turns
(17) Rollover, 17 or more quarter turns (specify): _____
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)
(99) Rollover (overturn), details unknown

46. Rollover Initiation Type: 00
(00) No rollover
(01) Trip-over
(02) Flip-over
(03) Turn-over
(04) Climb-over
(05) Fall-over
(06) Bounce-over
(07) Collision with another vehicle
(08) Other rollover initiation type specify): _____
(98) Rollover--end-over-end
(99) Unknown rollover initiation type

47. Location of Rollover Initiation: 0
(0) No rollover
(1) On roadway
(2) On shoulder – paved
(3) On shoulder – unpaved
(4) On roadside or divided trafficway median
(8) Rollover--end-over-end
(9) Unknown

48. Rollover Initiation Object Contacted: 00
(Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied: 0
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify): _____
(6) Non-contact rollover forces (specify): _____
(8) Rollover--end-over-end
(9) Unknown

50. Direction of Initial Roll: 0
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(8) Rollover--end-over-end
(9) Unknown roll direction

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0

52. Rear Override/Underride (this Vehicle) 1
(0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

Override (see specific CDC)
(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))
(1) 1st CDC
(2) 2nd CDC
(3) Other not automated CDC (specify):

_____

Underride (see specific CDC)
(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))
(4) 1st CDC
(5) 2nd CDC
(6) Other not automated CDC (specify):

_____

(7) Medium/heavy truck or bus override (of any configuration)
(9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(996) Non-horizontal impact
(997) Noncollision
(998) Impact with object
(999) Unknown

53. Heading Angle For This Vehicle 260

54. Heading Angle For Other Vehicle 255

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
(0) No towed unit
(1) Yes—towed trailing unit
(9) Unknown

56. Documentation of Trajectory Data for This Vehicle 0
(0) No
(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
(0) Not collision (for highest delta V) with tree or pole
(1) Not damaged
(2) Cracked/sheared
(3) Tilted <45 degrees
(4) Tilted ≥45 degrees
(5) Uprooted tree
(6) Separated pole from base
(7) Pole replaced
(8) Other (specify):

_____

(9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

Delta V Calculated
(01) Reconstruction program-damage only routine
(02) Reconstruction program-damage and trajectory routine
(03) Missing vehicle algorithm

Delta V Not Calculated
(04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstuction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

(05) Rollover
(06) Other non-horizontal forces
(07) Sideswipe type damage
(08) Severe override
(09) Yielding object
(10) Overlapping damage
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):

_____

_____

(98) Other, (specify): _____

_____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V — Highest: 005

5 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

60. Longitudinal Component of Delta V — Highest: (+) 005

+5 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: _000 means greater than -0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(_999) Unknown

61. Lateral Component of Delta V — Highest: (-) 001

−1 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: _000 means greater than -0.5 kmph and less than +0.5 kmph)
(±160) ±159.5 kmph and above
(_999) Unknown

62. Energy Absorption — Highest: 00 2,800

2,791 Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

63. Impact Speed — Highest: 998

_____ Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(998) Trajectory algorithm not run
(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V) — 3
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed — Highest: 005

4.6 Nearest kmph (highest)

_____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

ESTIMATED DELTA V

66. Estimated Highest Delta V (Researcher Determined) 0
(0) Reconstruction Delta V coded

Estimated Delta V
(1) Less than 10 kmph
(2) ≥ 10 kmph but < 25 kmph
(3) ≥ 25 kmph but < 40 kmph
(4) ≥ 40 kmph but < 55 kmph
(5) ≥ 55 kmph

Other estimates of damage severity
(6) Minor
(7) Moderate
(8) Severe

(9) Unknown

INSPECTION TYPE

67. Type of Vehicle Inspection 3
(0) No inspection
(1) Vehicle fully repaired-no damage evident
(2) Partial inspection (specify): _____
(3) Complete inspection

DELTA V EVENT NUMBER

68. Delta V Event Number 1
_____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle
(99) Unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,

OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 02

VEHICLE IDENTIFICATION

VIN 1FMDU [redacted] Model Year 91

Vehicle Make (specify): FORD

Vehicle Model (specify): Explorer

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
	(L) BC over 40 cm	starts 30 cm (L) of center	
	39 (L) of center		

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
	REAR Bumper	40	9	49	9	7	5.5	4			
	FREE		7		7	5	5	4			
	Resultant	40	2	49	2	1.5	.5	0			-69
					--						

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase (112 [redacted])	111.9	inches	x 2.54	=	284.2	cm
Overall Length	184.3	inches	x 2.54	=	468.1	cm
Maximum Width	70.2	inches	x 2.54	=	178.3	cm
Curb Weight	3,824	pounds	x 0.4536	=	1,734.6	kg
Average Track	7	inches	x 2.54	=	158	cm Estimated
Front Overhang	29.6	inches	x 2.54	=	75.2	cm
Rear Overhang	42.8	inches	x 2.54	=	108.7	cm
Undeformed End Width	___.	inches	x 2.54	=	158	cm
Engine Size: cyl/displ.	____	cc	x 0.001	=	4.0	L
V-6 MFI	245	CID	x 0.0164	=	4.0	L

U32 series

[redacted]

3675 shipping wt (5-speed manual)
100 fluids

3775

[redacted]

Curb Weight (5-speed manual) 3,824
4-speed automatic ?
Unknown

SPECIAL CRASH INVESTIGATION ADDENDUM

Submodel Designation: {specify} **Color:** {specify} White **Repair Cost:** $

Transmission: {circle} (Automatic) | Manual **Speed:** 3-speed | (4-speed) | 5-speed | Other:

Steering: {circle} (Power-assisted) | Manual **Type:** rack-and-pinion | worm-and-gear | Other
{please describe}: recirculating ball

Brakes: {circle} (Power-assisted) | Manual **Type:** 4-wheel disc | 4-wheel drum | 4-wheel hydraulic | (front disc, rear drum) | Other:

Observed Defects: {specify}

Fleet Type: {circle} (Private vehicle) | Rental vehicle | Leased vehicle | Commercial vehicle | Other
{please describe}:

VEHICLE DAMAGE SKETCH

TIRE–WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	2	2
LF	2	2
RR	2	2
LR	2	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase	284	cm
Overall Length	468.	cm
Maximum Width	178	cm
Curb Weight	1735	kg
Average Track	158	cm
Front Overhang	75.	cm
Rear Overhang	109	cm
Undeformed End Width	158	cm
Engine Size: cyl./displ.	V6 4.0	L

WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

RF ± ___ ___ o
LF ± ___ ___ o
RR ± ___ ___ o
LR ± ___ ___ o

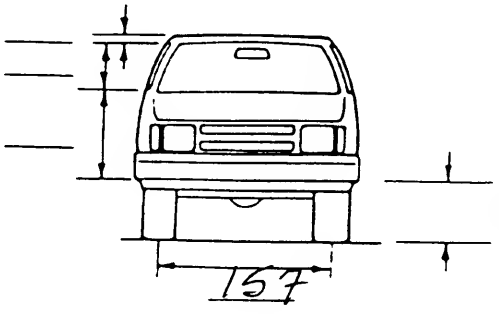
Within ± 5 degrees

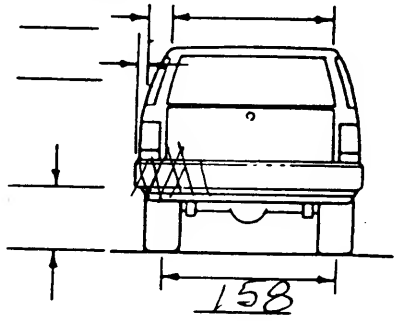
DRIVE WHEELS

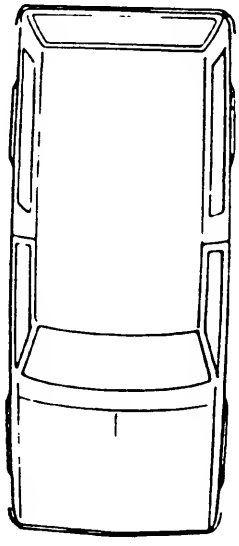
☐ FWD ☒ RWD ☐ 4WD

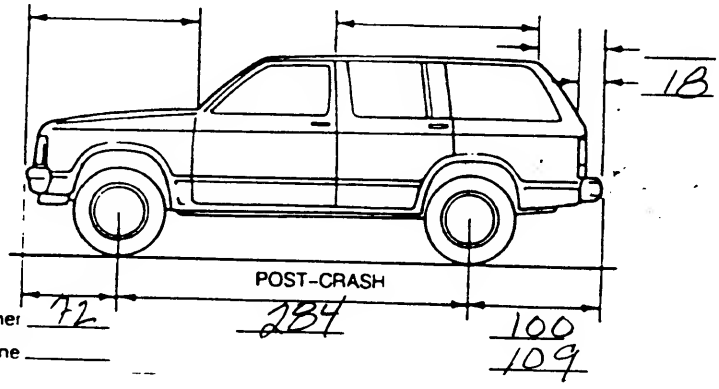
Approximate Cargo Weight _____ kg

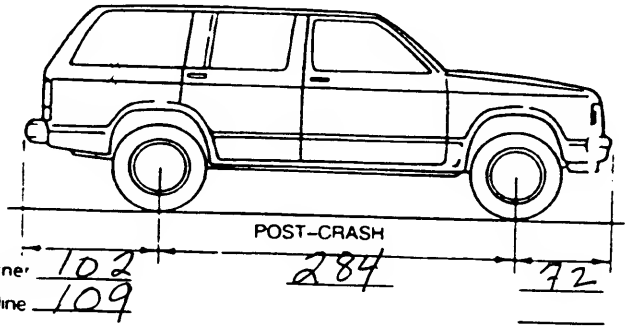
MEASUREMENTS IN CENTIMETERS











NOTES Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of stations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

Dodge Div., Chrysler Corp., [redacted]

Type of Body Pass. Cap.	Model	Dimensions inches W.B.	Lt.	Wt.	Ht.	Ship. Wt.	Tax H.P.	Max GVW	Ins wgt class	List Price
8-PS Wagon B250 Maxi	Base	127.6"	224.7"	50.0"	79.7"	4567	48.92	6400	L	21,829
8-PS Wagon B350	Base	127.6"	198.7"	50.0"	80.9"	4555	48.92	7500	L	18,950
Van B250	Base	127.6	196.9"	50.0"			36.69	6010	L	16,643
12-PS Wagon B350 Maxi	Base	127.6"	224.7"	50.0"	80.6"	4749	48.92	7500	L	19,967
Van B350	Base	127.6"	196.9"	50.0"		4215	48.92	7500	L	17,086
Van B350	Base	127.6"	196.9"	50.0"		4264	48.92	8510	L	17,086
Van B350 Maxi	Base	127.6"	222.9"	50.0"		4364	48.92	7500	L	18,051
Van B350 Maxi	Base	127.6"	222.9"	50.0"		4381	48.92	8510	L	18,051

1993 Ram Wagon & Van V8 cyl 5.9 liter OVH SMIP Gas Engine

Bore & Stroke 4.0x3.58; Tax H.P. 51.2; SAE H.P. 230@4000; Torque 325@3200; D.P. 360 cu.in., 5.9 liter Auto. Trans. 4-speed; EPA Mileage (Van) 12/16 (Wagon) 12/15

Van B350 Maxi	Base	127.6"	222.9"	50.0"		4594	51.2	9000	L	18,434

Options Ram Wagon & Van: Destination Charges-$570; Air Conditioning Front-$970; Console-$153; Maximum Engine Cooling-$66; Aux. Auto. Trans. Cooling-$64; Engine Block Heater-$34; HD Suspension Front-$15 Rear-$71; Trailer Towing Pkg-$412

1993 Ramcharger V8 cyl 5.2 liter OHV SMIP Gas Engine

Bore & Stroke 3.91x3.31; Tax H.P. 48.92; SAE H.P. 230@4800; Torque 280@3200; D.P. 318 cu.in., 5.2 liter Auto. Trans. 4-speed; EPA Mileage 13/17

2-dr Utility 2WD	AD150S	106.0"	188.8"	79.5"	70.59"	4223	48.92	5600	L	17,636
2-dr Utility 2WD	AD150	106.0"	188.8"	79.5"	70.59"	4233	48.92	5600	L	19,926
2-dr Utility 4WD	AW150S	106.0"	188.8"	79.5"	74.06"	4570	48.92	6000	L	19,985
2-dr Utility 4WD	AW150	106."	188.8"	79.5"	74.06"	4580	48.92	6000	L	21,696

Options Ramcharger: Destination Charges-$595; Air Conditioning-$836; Rear Step Bumper-$122; Radio AM/FM Stereo-$194 W/cassette-$399; Snow Plow Group-$1048, Skid Plate-$90; Deluxe Convenience Group-$460; AntiSpin Differential-$257; Sunscreen Glass-$219; Power Convenience Group-$381

FORD MOTOR CO., The American Road, [redacted] Michigan [redacted]

1991 SIERRA 3500 CLUB COUPE: V8 cyl 6.2 L, V8 H.D. Diesel Engine(LL4)

Bore & Stroke 3.98x3.82; Tax H.P. 50.69; Wideside: Manual Trans., Hyd. Power Brakes

Pickup 2WD E63/B3J	TC30953	155.5"			9745	50.69	10000	L	18,810
Pickup 4WD E63/B3J	TK30953	155.5"			9745	50.69	10000	L	20,825

1991 SIERRA 3500 CLUB COUPE: V8 7.4 L, V8 EFI Gas Engine(L19)

Bore & Stroke 4.25x4.0; Tax H.P. 57.9; Wideside, Manual Trans, VAC Power Brakes

Pickup 2WD E63	TC30963	155.5"			9745	57.9	10000	L	$17,085
Pickup 4WD E63	TK30963	155.5"			9745	57.9	8600	L	$19,410

Options Sierra 3500 Club Coupe: Destination Charge, $575; Engine, 7.4 L, V8(454"), EFII Gas Engine; $470; Transmission, 4-Spd. Auto O/D, $870; Locking Diff., $252; Air Conditioning, $780; Bed Liner, $335; Camper Equip, $228; Speed Control, $346; Power Locks, $344; Defogger, $154; Tinted Glass, $150; Radio, AM/FM Stereo, $122; W/Equalizer, $272; Skid Plate, $95; H.D. Springs, $63; Trailer Equip, $408; Tow Hooks, $38; Sliding Windows, $113.

FORD MOTOR CO., The American Road, [redacted] Michigan [redacted]

1992 Explorer 2 door V6 cyl 4.0 liter EFI Gas Engine(99X)

Bore & Stroke 3.95x3.32; Tax H.P. 37.45;Man. Trans. 5-speed w/OD

XL 2WD	U22	102.0"		3675	37.45	4720	L	15,854
XL 4WD	U24	102.0"		3879	37.45	4780	L	17,644
Sport 2WD	U22	102.0"		3675	37.45	4720	L	17,000
Sport 4WD	U24	102.0"		3879	37.45	4940	L	18,731
Eddie Bauer 2WD	U22	102.0"		3675	37.45	4720	L	20,428
Eddie Bauer 4WD	U24	102.0"		3879	37.45	4780	L	22,159

1992 Explorer 4 door V6cyl 4.0 liter EFI Gas Engine(99X)

Bore & Stroke 3.15x3.14; Tax H.P. 23.81; Man. Trans. 5-Speed w/OD

XL 2WD	U32	112.0"	3675	23.81	4720	L	16,692
XL 4WD	U34	112.0"	4040	23.81	5020	L	18,505
XLT 2WD	U32	112.0"	3854	23.81	5020	L	18,647
XLT 4WD	U34	112.0"	3879	23.81	4780	L	20,401
Eddie Bauer 2WD	U32	112.0"	3854	23.81	5100	L	21,798
Eddie Bauer 4WD	U34	112.0"	4040	23.81	5240	L	23,553

Options Explorer: Destination Charges-$485

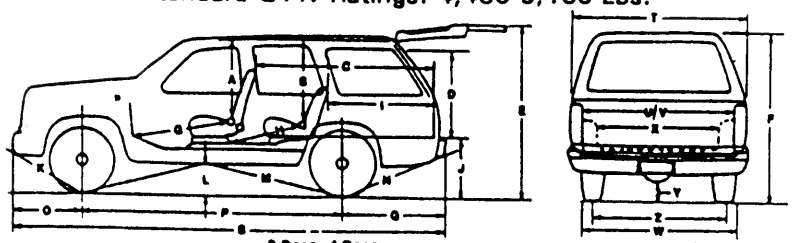
1992 F-150 6 cyl 4.9 liter EFI Gas Engine(99Y)

Bore & Stroke 4.0x3.98; Tax H.P. 38.4; D.P. 300 cu.in., 4.9 liter; Man. Trans. 5-speed w/OD

Styleside								
Reg Cab S 2WD	F15	117.0"	3843	38.4	5250	L	10,336
Reg Cab S 2WD	F15	133.0"	3955	38.4	5450	L	10,572
Reg Cab 2WD	F15	117.0"	3937	38.4	6050	L	12,807

FORD EXPLORER

Standard GVW Ratings: 4,480-5,180 Lbs.



Code	Description	2-Door (inches)	4-Door (inches)
A	Head Room (Front)	38.8	38.9
B	Head Room (Rear) —	38.0	38.1
C	Cargo Length to Front Seat	86.6	72.9
D	Liftgate Height	33.7	33.7
E	Ground to Open Liftgate	78.9	77.3
F	Cab Height (Empty) — 2WD	67.5	67.3
	—4WD	67.5	67.3
	Cab Height (Loaded) — 2WD	64.8	64.6
	—4WD	66.1	66.1
G	Leg Room (Front)	42.4	42.4
H	Leg Room (Rear)	36.6	36.6
I	Cargo Length (Rear Seat Upright)	39.2	38.1
J	Load Height (empty)	27.7	28.2
K	Approach Angle (Empty) — 2WD	28.4°	28.3°
	—4WD	31.9°	31.9°
L	Step Height(Empty) — 2WD	19.3	19.1
	—4WD	20.1	20.1

Code	Description	2-Door (inches)	4-Door (inches)
M	Ramp Breakover Angle (Degrees)2WD	16.2°	14.0°
	—4WD	18.8°	20.2°
N	Departure Angle (Empty) — 2WD	17.9°	18.4°
	—4WD	17.2°	23.8°
O	Front Overhang	39.6	39.6
P	Wheelbase	102.1	111.9
Q	Rear Overhang	42.8	42.8
S	Overall Length	174.5	184.3
T	Overall Width	70.2	70.3
U	Shoulder Room (Front)	57.1	57.1
U	Shoulder Room (Rear)	57.9	57.1
V	Hip Room (Front)	61.9	61.9
V	Hip Room (Rear)	43.6	61.9
W	Liftgate Width @ Floor	47.0	47.0
X	Width Between Wheelhouse	41.9	41.9
Y	Axle Clearance (Rear)	8.34	8.34
Z	Tread Width (Front/Rear)	58.3	58.3

ENGINE: Standard: 4.0L (425cid) EFI V-6, 155 GHP @ 4200 RPM.
Calif. Engine: 4.0L (425cid) EFI V-6, 155 GHP @ 4200 RPM.

MODELS AVAILABLE: 102.1" wb. 2-Door Compact Utility 4x2 or 4x4, with XL, Sport or Eddie Baur trim.
111.9" wb. 4-Door Compact Utility 4x2 or 4x4 with XL, XLT or Eddie Baur trim.

GVW RATING	MINIMUM EQUIPMENT REQUIRED FOR GVW RATING
4,580	Standard - 4x2, 2-Door, 149 lbs. Max. Reg. Prod. Opt. Wt.
4,720	4x2, 2-Door, 289 lbs. Max. Regular Product Option Weight.
4,780	Standard - 4x4, 2-Door, 189 lbs. Max. Reg. Prod. Opt. Wt.
4,860	4x4, 2-Door, 269 lbs. Max. Regular Product Option Weight
5,000	Standard - 4x4, 4-Door, 88 lbs. Max. Reg. Prod. Opt.. Wt.
5,040	Standard - 4x2, 4-Door, 305 lbs. Max. Reg. Prod. Opt. Wt.
5,120	4x2, 4-Door, 305 lbs. MRPOW & 600 lbs. Passenger Wt.
5,180	4x2, 4-Door, 305 lbs. MRPOW & 750 lbs. Passenger Wt.
5,180	4x4, 4-Door, 268 lbs. MPPOW & 750 lbs. Passenger Wt.
5,280	4x4, 4-Door, 305 lbs. MRPOW & 750 lbs. Passenger Wt.
5,320	4x4, 4-Door, 305 lbs. MRPOW & 900 lbs. Passenger Wt.
5,360	4x4, 4-Door, 305 lbs. MRPOW & 1,050 lbs. Passenger Wt.

FORD EXPLORER

CURB WEIGHTS & DIMENSIONS: (Standard Equipment, fuel

Model	WB	OAL	Front	Rear	Total
4x2, 2-Door	102.1	174.5	1,916	1,765	3,681
4x2, 4-Door	111.9	184.3	2,010	1,814	3,824
4x4, 2-Door	102.1	174.5	1,989	1,852	3,841
4x4, 4-Door	111.9	184.3	2,111	1,901	4,012

Cargo Vol. (cu.ft.)	2-Door seat up	/2-D. seat down/	4-Door seat
	32.6	69.4	42.6

GENERAL SPECIFICATIONS

FRONT AXLE: w/4X2, Ford twin I-beam IFS, rated capacity 2,500 lbs. w/4x4, Ford twin-traction beam IFS drive axle, hypoid gear, rated capacity 2,750 lbs., ratio 3.55 (3.73 Opt.).

REAR AXLE: Ford single reduction, semi-floating, hypoid gear hotchkiss drive, rated capacity 3,200 lbs., ratio w/4x2, 3.27 (3.08, 3.73 Opt.); ratio w/4x4, 3.55 (3.73 Opt.) & Automatic locking front hubs. Optional: Limited slip differential; Manual locking front hubs w/4x4.

SERVICE BRAKES: Dual hydraulic Power w/Rear anti-lock brakes, self-adjusting 8.97"OD dual-diaphragm power booster, 10.28" dia. single piston (10.86" w/4x4) floating caliper disc front, 30.04 sq.in. lining area (34.95 sq.in. w/4x4); 10 x 2.5" drum rear, 96.72 sq.in. lining area, rear wheel anti-lock system.

PARKING BRAKE: Cable actuation of rear service brakes, foot-operated.

CLUTCH: 10" dia. single plate, woven non-asbestos, segmented disc, hydraulic clutch w/spring vibration damper, 71.3 sq.in. facing area.

COOLING SYSTEM: 7.8 quarts (8.3 opt.), 334 sq.in. frontal area radiator, belt driven 8-blade 17.7" dia. plastic fan.

DRIVE LINE: Tubular shafts, needle bearing universal joints.

ELECTRICAL SYSTEM: 12 V; 95 amp alternator; 72 amp/hr, 650 CCA MF battery.

FRAME: 36,000 psi steel, single channel w/5-crossmembers, 6.08 x 2.28 x 0.15" side rails, 2.89 section modulus.

FUEL TANK: 19 gallon aft-of-axle mounted, w/skid plate.

STEERING: XR-50 power recirc.ball gear 17:1 ratio. Opt: Speed control/Tilt wheel.

SUSPENSION: Front - Computer selected coil springs, w/4x2, capacity at pad/ground 1,257/1,075 lbs. each; w/4x4, 1,472/1,130 lbs. each. Rear - Multi-leaf, 2-stage variable rate, 1,020/1,325 lbs. each. Optional: 1,020/1,380 lbs. each; w/112 wb. only, 1,250/1,450 lbs. each.

TRANSFER CASE: w/4x4 only, Warner 1350, 2-speed, ratios 2.48, 1.00.

TRANSMISSION: Mazda 5-speed HD manual w/OverDrive, full synch, ratios 3.40, 2.20, 1.50, 1.00, 0.79, reverse 3.42. Optional: Ford A4LD, 4-sp. auto. w/OD

WHEELS AND TIRES: Five P225/70R15SL tubeless radial tires on 15" disc wheels, 6" JJ rims. Optional: P235/75R15SL tires; 7" JJ rims.

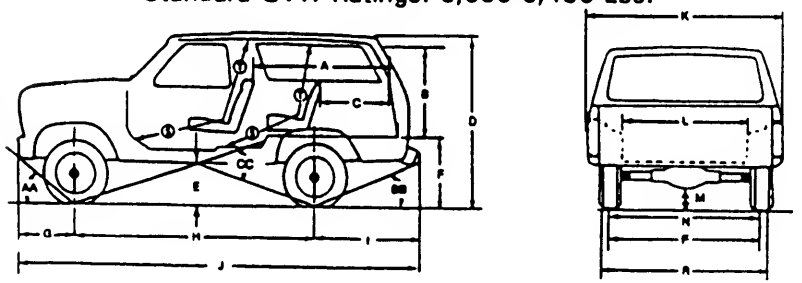
FORD EXPLORER

STANDARD EQUIPMENT: 102" 2-Door or 112" 4-Door models w/XL trim; Front & rear shock absorbers; Front & rear stabilizer bars; Cargo tie down hooks (4); Bright front & rear bumpers; Chrome grille; Heater/defroster; Front bucket seats; Folding split rear bench seat;; Electric interval wihshield wipers & washers; Electric shift 4x4 "Touch Drive"; Automatic locking front hubs; Mechanical jack; emission control system; Black foldaway LH & RH side mirrors; AM/FM radio; Tinted glass; Fuel tank skid plate; Transfer case skid plate w/4x4; Rear lift-gate w/flip window.

OPTIONAL EQUIPMENT: 6-passenger seating w/4-Door model; Sport or Eddie Bauer trim w/2-Door; XLT or Eddie Bauer trim w/4-Door; Air conditioner; Increased capacity elec./cooling systems; Roof rack; Light Group; Front Captain's chairs w/floor console; Calif. emissions certification; High altitude emission syst.; Manual locking front hubs; Trailer towing pkg.; Tilt-up roof opening; Rear window washer/wiper; Power window/lock group; Privacy glass; Up-graded audio system; Speed control/Tilt steering wheel.

FORD BRONCO 4 X 4

Standard GVW Ratings: 6,050-6,450 Lbs.



Code	Description	Inches Degrees
A	Driver's Seat to Rear	62.2
B	Tailgate Height	36.8
C	Cargo Length	30.8
D	Overall Height	74.6
E	Ground Clearance	8.1
F	Tailgate Base to Ground	32.7
G	Front Overhang	30.6
H	Wheelbase	104.7
I	Rear Overhang	46.3
J	Overall Length	180.6
K	Max. Body Width	78.1
L	Wheelhouse Width	60.8

Code	Description	Inches Degrees
M	Axle Clearance: — Front	6.8
	Axle Clearance: — Rear	7.06
N	Front Tread Width	66.1
P	Rear Tread Width	64.4
R	Tailgate Inside Opening	63.6
S	Leg Room — Front	41.1
	Leg Room — Rear	37.7
T	Head Room — Front	41.2
	Head Room — Rear	38.3
AA	Approach Angle	34.6°
BB	Departure Angle	16.6°
CC	Ramp Breakover Angle	18.6°

FORD LIGHT & MEDIUM DUTY TRUCK ENGINES

MODEL	2.3L (140) IL-4	2.9L(179)OHV V-6	3.0L (182) OHV V-6
Application	Ranger	Ranger	Aerostar, Ranger
Bore & Stroke	3.78 x 3.13	3.66 x 2.83	3.50 x 3.14
Displacement	140 cu.in - 2.3L	179 cu.in. - 2.9L	182 cu.in - 3.0L
Taxable HP	22.8	32.1	29.4
Net BHP @ RPM	100 @ 4600	140 @ 4600	145 @ 4800
Net Torque @ RPM	133 @ 2600	170 @ 2600	165 @ 3600
Compression Ratio	9.2 to 1	9.0 to 1	9.3 to 1
Fuel Metering Syst.	----------Electronic Fuel Injection----------		
MODEL	4.0L (245) V-6	4.9L (300) IL-6	5.0L (302) V-8
Application	Aerostar/Ranger/ Explorer	----------Bronco/E-150/E-250 Van/---------- ----------F-150/F-250/F-350----------	
Bore & Stroke	3.95 x 3.32	4.00 x 3.98	4.00 x 3.00
Displacement	245 cu.in - 4.0L	300 cu.in - 4.9L	302 cu.in. - 5.0L
Taxable HP	26.9	38.4	51.2
Net Brake HP	155 w/Aero/Expl. 160 w/Ranger	145*/150** @ 3400 RPM	185 @ 3800 RPM
Net Torque @ RPM	215 Aero/220Expl. 225 w/Ranger	265*/260** @ 2000 RPM	270 @ 2400 RPM
Compression Ratio	9.0 to 1	8.8 to 1	9.0 to 1
Fuel Metering Syst.	----------Electronic Fuel Injection----------		
MODEL	5.8L + (351) V-8	5.8L + + (351) V-8	7.5L + + (460) V-8
Application	Bronco-E/F250/350	E-250 CW/ E-350/ F-250HD/ F-350	
Bore & Stroke	4.00 x 3.50	4.00 x 3.50	4.36 x 3.85
Displacement	351 cu.in - 5.8L	352 cu.in. - 5.8L	460 cu.in. - 7.5L
Taxable HP	51.2	51.2	60.8
Net BHP @ RPM	200 @ 3800	200 @ 3800	230 @ 3600
Net Torque @ RPM	300 @ 2400	300 @ 2400	390 @ 2200
Compression Ratio	8.8 to 1	8.8 to 1	8.5 to 1
Fuel Metering Syst.	----------Electronic Fuel Injection----------		

* Bronco, E-150 & F-150 w/3.08 axle ratio, only. **All other applications
+ w/Models under 8,500 lbs. GVWR. + + w/Models over 8,500 lbs. GVWR.

MODEL (Medium Duty)	7.0L (429) EFI, 90° V-8
Type	Valve-in-Head
Emissions Certification	All States
Bore & Stroke	4.36 x 3.59
Displacement	429 cu. in. - 7.0 Liters
Taxable Horse Power	61.4
Net BHP @ RPM	235.6 @ 3600 RPM
Net Torque @ RPM	358 @ 2800 RPM
Compression Ratio	8.0 to 1
Fuel Injection System	Electronic Port Injection

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover—end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify): _____
- (36) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision — details unknown

Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision with Nonfixed Object
- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object
- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	01	175		B	L	E	E	01

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. 01	5. 01	6. 06	7. B	8. L	9. E	10. E	11. 01

Second Highest Delta "V"

12.	13.	14.	15.	16.	17.	18.	19.

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
049	002	002	001	000			+ 069

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
							+

26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) 158
____ Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

27. Direct Damage Width (For highest severity impact) 040
____ Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

28. Original Wheelbase 284
____ Code to the nearest centimeter
(650) 650 centimeters or more
(999) Unknown
___ ___ ___ . ___ inches X 2.54 = ___ ___ ___ centimeters

29. Original Average Track Width 999
____ Code to the nearest centimeter
(185) 185 centimeters or more
(999) Unknown
___ ___ ___ . ___ inches X 2.54 = ___ ___ ___ centimeters

30. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

31. Researcher's Assessment of Vehicle Disposition 0
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications (specify): _____
(Include photograph of CERTIFICATION PLACARD in case report)
(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence 0
(0) No fire

Yes, fire occurred
(1) Minor
(2) Major
(9) Unknown

34. Origin of Fire 0
(0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____
(9) Unknown

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap 2
36. Location of Fuel Tank-2 Filler Cap 0
(0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle) on left side plane
(3) Aft of center of the rear wheels (rear axle) on right side plane
(4) Forward of center of the rear wheels (rear axle) on left side plane
(5) Forward of center of the rear wheels (rear axle) on right side plane
(6) Over the center of the rear wheels (rear axle) on left side plane
(7) Over the center of the rear wheels (rear axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1 1
38. Type of Fuel Tank-2 0
(0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1 5
40. Location of Fuel Tank-2 0
(0) No fuel tank
(1) Aft of center of the rear wheels (rear axle) centered
(2) Aft of center of the rear wheels (rear axle) left side
(3) Aft of center of the rear wheels (rear axle) right side
(4) Forward of center of the rear wheels (rear axle) centered
(5) Forward of center of the rear wheels (rear axle) left side
(6) Forward of center of the rear wheels (rear axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1 1
42. Damage to Fuel Tank-2 0
(0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 0
(0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage
(2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify):_____
(9) Unknown

45. Fuel Type-1 01

46. Fuel Type-2 00

Single Fuel Type
(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify):
_____

Electric Powered or Electric/Solar Powered Vehicles
(10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify):_____

(98) Other Hybrid (specify):
_____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0
(0) No (one or two tanks only)

Yes - More Than Two Tanks
(1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location):
_____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 02

INTEGRITY

4. Passenger Compartment Integrity: 00
(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (back door)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window (backlight)
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window (side window and backlight)
(12) Windshield and side window
(13) Door and side window
(98) Other combination of above (specify): _____
(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 1

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify): _____
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify): _____
(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2
20. BL 3 21. Roof 0 22. Other 2

(0) No glazing
(1) AS-1 — Laminated
(2) AS-2 — Tempered
(3) AS-3 — Tempered-tinted (original)
(4) AS-2 — Tempered-with after market tint
(5) AS-3 — Tempered-tinted (with additional after market tint)
(6) AS-14 — Glass/Plastic
(7) Glazing removed prior to accident
(8) Other (specify): _____
(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2
28. BL 1 29. Roof 0 30. Other 1

(0) No glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(7) Glazing removed prior to accident
(9) Unknown

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 1 34. LR 1 35. RR 1
36. BL 1 37. Roof 0 38. Other 1

(0) No glazing
(1) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1
44. BL 1 45. Roof 0 46. Other 1

(0) No glazing
(1) No occupant contact to glazing
(2) Glazing contacted by occupant but no glazing damage
(3) Glazing in place and cracked by occupant contact
(4) Glazing in place and holed by occupant contact
(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(6) Glazing out-of-place by occupant contact and holed by occupant contact
(7) Glazing removed prior to accident
(8) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	–	DAMAGE VALUE	=	DEFORMATION
	–		=	
NO DEFORMATION			=	
	–		=	
	–		=	

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47.___ ___	48.___ ___	49.___	50.___
2nd	51.___ ___	52.___ ___	53.___	54.___
3rd	55.___ ___	56.___ ___	57.___	58.___
4th	59.___ ___	60.___ ___	61.___	62.___
5th	63.___ ___	64.___ ___	65.___	66.___
6th	67.___ ___	68.___ ___	69.___	70.___
7th	71.___ ___	72.___ ___	73.___	74.___
8th	75.___ ___	76.___ ___	77.___	78.___
9th	79.___ ___	80.___ ___	81.___	82.___
10th	83.___ ___	84.___ ___	85.___	86.___

LOCATION OF INTRUSION

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____
- (99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components
- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

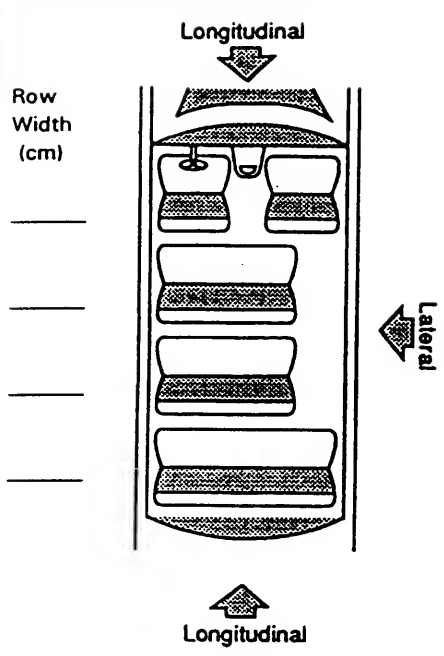
- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

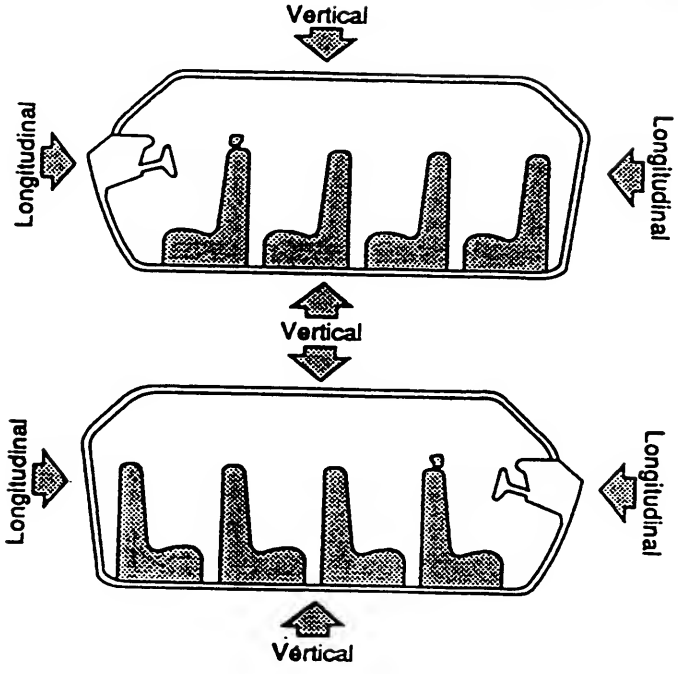
DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS





LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters) COMPARISON VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
			–		=		
	No Intrusions		–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

Document no more than the 15 most severe intrusions

STEERING COLUMN

87. Steering Column Type — 2
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify): _____
(9) Unknown

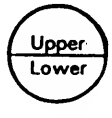
88. Tilt Steering Column Adjustment — 1
(0) No tilt steering column
(1) Full up
(2) Between full up and center
(3) Center
(4) Between center and full down
(5) Full down
(9) Unknown

89. Telescoping Steering Column Adjustment — 0
(0) No telescoping steering column
(1) Full back
(2) Between full back and midpoint
(3) Midpoint
(4) Between midpoint and full forward
(5) Full forward
(9) Unknown

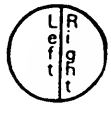
90. Steering Rim/Spoke Deformation — 0 0
____Code actual measured deformation to the nearest centimeter
(00) No steering rim deformation
(01-14) Actual measured value in centimeters
(15) 15 centimeters or more
(98) Observed deformation cannot be measured
(99) Unknown

91. Location of Steering Rim/Spoke Deformation — 0 0
(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D



Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke



(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

92. Odometer Reading — 167,000
____ kilometers
Code to the nearest 1,000 kilometers
(000) No odometer
(001) Less than 1,500 kilometers
(500) 499,500 kilometers or more
(999) Unknown
104.082 miles X 1.6093 = 167504 kilometers

Source: ODOM

93. Instrument Panel Damage from Occupant Contact? — 0
(0) No
(1) Yes
(9) Unknown

94. Type of Knee Bolster Covering — 0
(0) No knee bolster
(1) Padded
(2) Rigid plastic
(8) Other (specify): _____
(9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? — 0
(0) No knee bolster
(1) No deformation
(2) Yes - deformation
(9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? — 0
(0) No glove compartment door
(1) No - door did not open
(2) Yes - door opened
(9) Unknown

97. Adaptive (Assistive) Driving Equipment — 0
(0) No adaptive driving equipment
(1) Adaptive driving equipment installed
(Check all that apply.)
[ ] Hand controls for braking/acceleration
[ ] Steering control devices (attached to OEM steering wheel
[ ] Steering knob attached to steering wheel
[ ] Low effort power steering (unit or device)
[ ] Replacement steering wheel (i.e., reduced diameter)
[ ] Joy-stick steering controls
[ ] Wheelchair tie-downs
[ ] Modification to seat belts (specify): _____
[ ] Additional or relocated switches (specify): _____
[ ] Raised roof
[ ] Wall-mounted head rest (used behind wheelchair)
[ ] Other adaptive device (specify): _____
(9) Unknown

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data ***for the driver and first seat passenger*** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	0	0
B-Flaps open at tear points?	0	0
C-Flaps damaged?	0	0
D-Air bag damaged?	00	00
E-Source of air bag damage	00	00
F-Air bag tethered?	0	0
G-Air bag have vent ports?	0	0
H-Other occupant contact air bag?	0	0
I-Occupant wearing eyewear?	0	0

A-Type of Air Bag
- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?
- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?
- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage
- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify): _____
- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

E-Source of Air Bag Damage
- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify): _____
- (03) Object carried by occupant, (specify): _____
- (04) Adaptive/assistive controls, (specify): _____
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): _____
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): _____
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

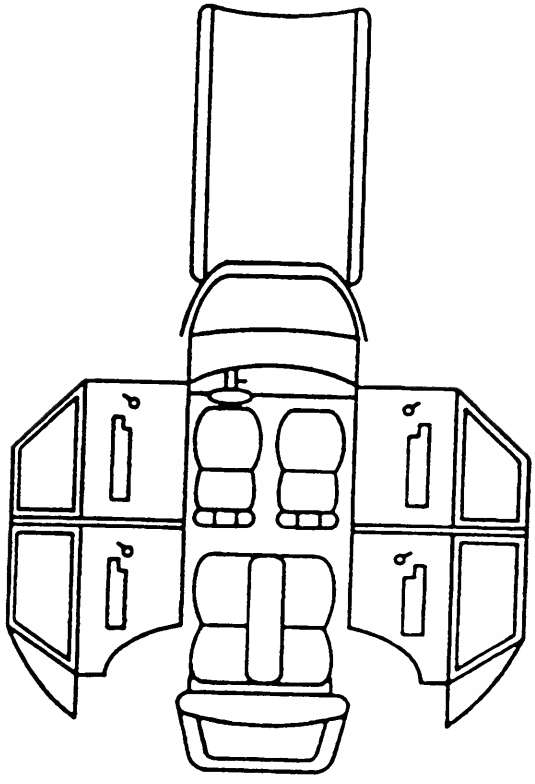
G-Did The Air Bag Have Vent Ports?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): _____
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

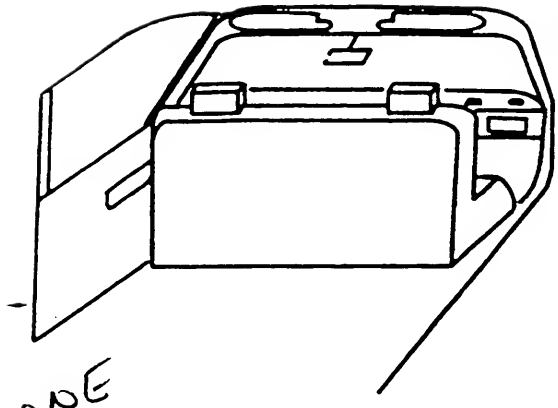
H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

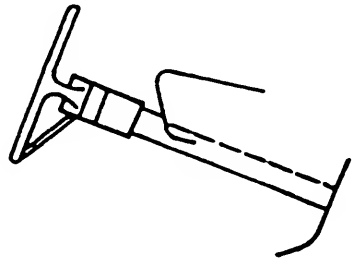
VEHICLE INTERIOR SKETCHES

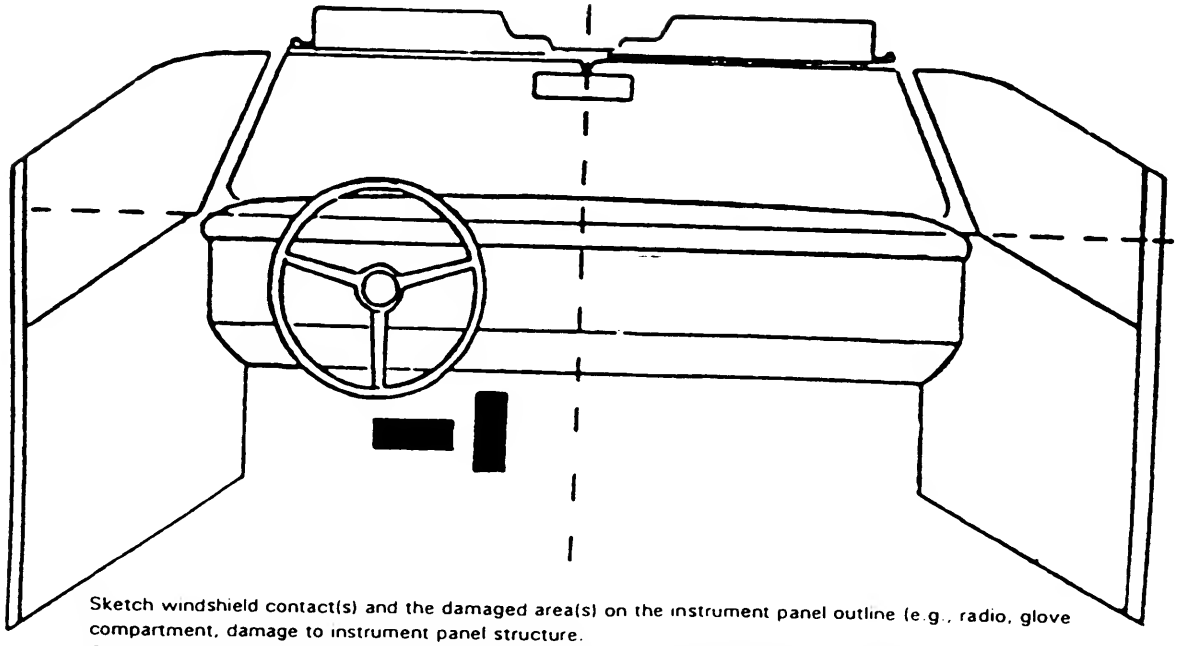
Note area of ejection/entrapment





NONE found





Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
(001) Windshield
(002) Mirror
(003) Sunvisor
(004) Steering wheel rim
(005) Steering wheel hub/spoke
(006) Steering wheel (combination of codes 004 and 005)
(007) Steering column,transmission selector lever, other attachment
(008) Cellular telephone or CB radio
(009) Add on equipment(e.g., tapedeck, air conditioner)
(010) Left instrument panel and below
(011) Center instrument panel and below
(012) Right instrument panel and below
(013) Glove compartment door
(014) Knee bolster
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
(017) Windshield reinforced by exterior object, (specify):
(019) Other front object (specify):

LEFT SIDE
(051) Left side interior surface, excluding hardware or armrests
(052) Left side hardware or armrest
(053) Left A (A1/A2)-pillar
(054) Left B-pillar
(055) Other left pillar (specify):
(056) Left side window glass
(057) Left side window frame
(058) Left side window sill
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(060) Other left side object (specify):

RIGHT SIDE
(101) Right side interior surface, excluding hardware or armrests
(102) Right side hardware or armrest
(103) Right A (A1/A2)-pillar
(104) Right B-pillar
(105) Other right pillar (specify):
(106) Right side window glass
(107) Right side window frame
(108) Right side window sill
(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(110) Other right side object (specify):

INTERIOR
(151) Seat, back support
(152) Belt restraint webbing/buckle
(153) Belt restraint B-pillar or door frame attachment point
(154) Other restraint system component (specify):
(155) Head restraint system
(160) Other occupants (specify):
(161) Interior loose objects
(162) Child safety seat (specify):
(163) Other interior object (specify):

AIR BAG
(170) Air bag-driver side
(175) Air bag compartment cover-driver side
(180) Air bag-passenger side
(185) Air bag compartment cover-passenger side
(190) Other air bag (specify)
(195) Other air bag compartment cover (specify)

ROOF
(201) Front header
(202) Rear header
(203) Roof left side rail
(204) Roof right side rail
(205) Roof or convertible top

FLOOR
(251) Floor (including toe pan)
(252) Floor or console mounted transmission lever, including console
(253) Parking brake handle
(254) Foot controls including parking brake

REAR
(301) Backlight (rear window)
(302) Backlight storage rack, door, etc.
(303) Other rear object (specify):

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT
(401) Hand controls for braking/acceleration
(402) Steering control devices (attached to OEM steering wheel)
(403) Steering knob attached to steering wheel
(405) Replacement steering wheel (i.e., reduced diameter)
(406) Joy stick steering controls
(407) Wheelchair tie-downs
(408) Modification to seat belts, (specify):
(409) Additional or relocated switches, (specify):
(410) Raised roof
(411) Wall mounted head rest (used behind wheel chair)
(412) Other adaptive device (specify):

CONFIDENCE LEVEL OF CONTACT POINT
(1) Certain
(2) Probable
(3) Possible
(9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	OtherAir Bag
FIRST	Availability/Function	0	0	
	Deployment	0	0	
	Failure	0	0	

Air Bag System Availability/Function
(0) Not equipped/not available
(1) Air bag

Non-functional
(2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment (This Occupant Position)
(0) Not equipped/not available
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, accident sequence undetermined
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Are There Indications of Air Bag System Failure? (This Occupant Position)
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	A-Availability/Function	0	0
	B-Use	0	0
	C-Type	0	0
	D-Proper Use	0	0
	E-Failure Modes	0	0

A-Automatic (Passive) Belt System Availability/Function
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

B-Automatic (Passive) Belt System Use
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

C-Automatic (Passive) Belt System Type
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

D-Proper Use of Automatic (Passive) Belt System
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

E-Automatic (Passive) Belt Failure Modes During Accident
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify): _____
(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4		4
	B-Evidence of usage	04		04
	C-Used in this crash?	04		04
	D-Proper Use	1		1
	E-Failure Modes	1		1
	F-Anchorage Adjustment	1		1
SECOND	A-Availability	4	3	4
	B-Evidence of usage	04	03	04
	C-Used in this crash?	04	13	04
	D-Proper Use	1	1	1
	E-Failure Modes	1	1	1
	F-Anchorage Adjustment	1	0	1
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

A-Manual (Active) Belt System Availability

(0) None available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available - type unknown

Integral Belt Partially Destroyed

(6) Shoulder belt (lap belt destroyed/removed)
(7) Lap belt (shoulder belt destroyed/removed)
(8) Other belt (specify): _____
(9) Unknown

B/C-Manual (Active) Belt System Use

(00) None used, not available, or belt removed/destroyed
(01) Inoperable (specify): _____
(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used - type unknown
(08) Other belt used (specify): _____
(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat - type unknown
(18) Other belt used with child safety seat (specify): _____
(99) Unknown if belt used

D-Proper Use of Manual (Active) Belts

(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

Belt Used Improperly

(3) Shoulder belt worn under arm
(4) Shoulder belt worn behind back or seat
(5) Belt worn around more than one person
(6) Lap belt worn on abdomen
(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of manual belt system (specify): _____
(9) Unknown

E-Manual (Active) Belt Failure Modes During Accident

(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other manual belt failure (specify): _____
(9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment

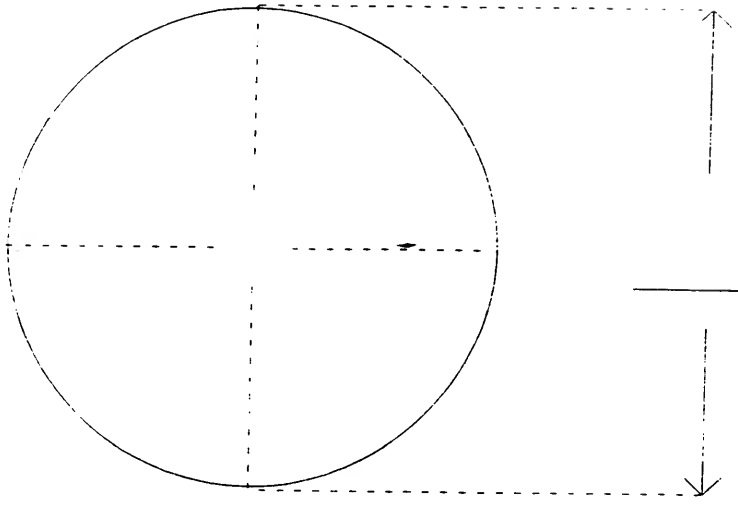
(0) No shoulder belt
(1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

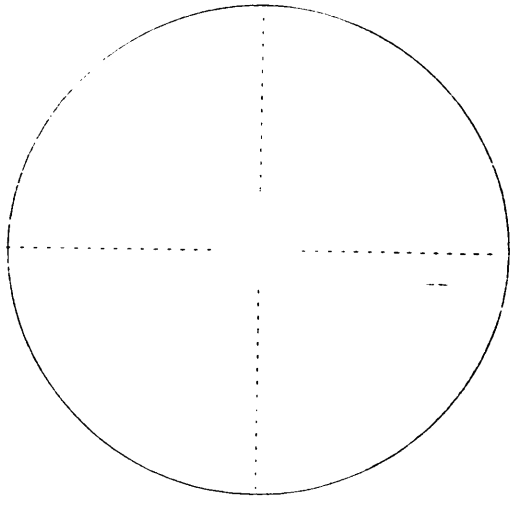
(2) In full up position
(3) In mid position
(4) In full down position
(5) Position unknown
(9) Unknown if position has adjustable upper anchorage adjustment

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

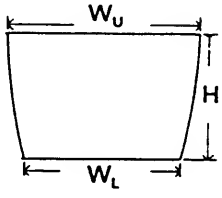


DRIVER AIR BAG SKETCHES (Cont'd)

3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____

height (H) _____

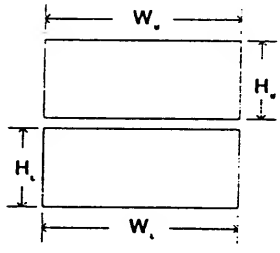


4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap b. Lower Flap

width (W_U) _____ width (W_L) _____

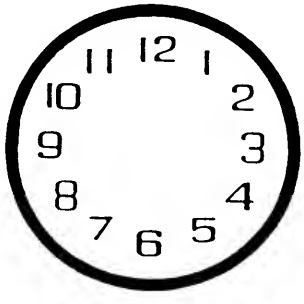
height (H_U) _____ height (H_L) _____



5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

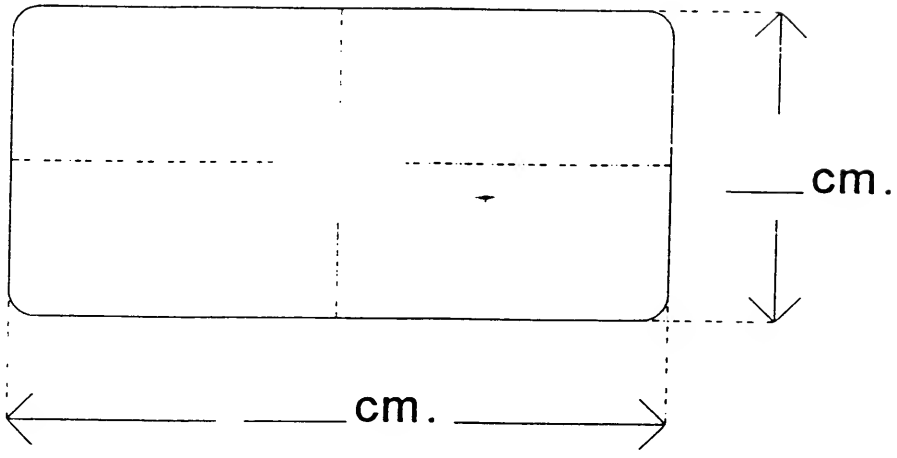
6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

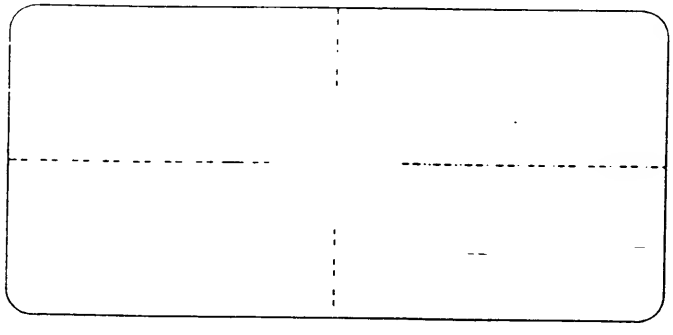


PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)

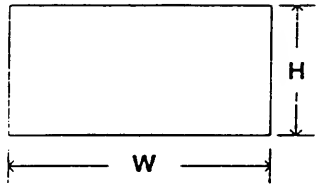


PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____

height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

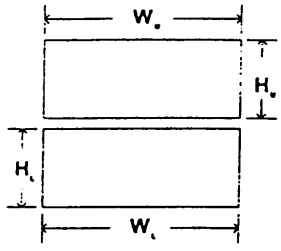
width (W_U) _____

height (H_U) _____

b. Lower Flap

width (W_L) _____

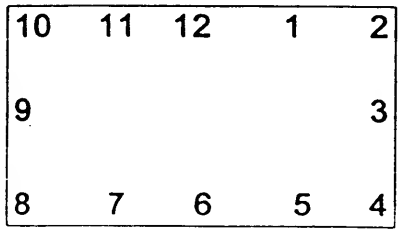
height (H_L) _____



5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON *"OTHER"* AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON *"OTHER"* AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
SECOND	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE

(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number	04					
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat
   - (0) No child safety seat
   - (1) Infant seat
   - (2) Toddler seat
   - (3) Convertible seat
   - (4) Booster seat
   - (7) Other type child safety seat (specify): _____
   - (8) Unknown child safety seat type
   - (9) Unknown if child safety seat used

2. Child Safety Seat Orientation
   - (00) No child safety seat

   Designed for Rear Facing for This Age/Weight
   - (01) Rear facing
   - (02) Forward facing
   - (08) Other orientation (specify): _____
   - (09) Unknown orientation

   Designed for Forward Facing for This Age/Weight
   - (11) Rear facing
   - (12) Forward facing
   - (18) Other orientation (specify): _____
   - (19) Unknown orientation

   Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
   - (21) Rear facing
   - (22) Forward facing
   - (28) Other orientation (specify): _____
   - (29) Unknown orientation
   - (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage
   Note: Options Below Are Used for Variables 3-5.
   - (00) No child safety seat

   Not Designed with Harness/Shield/Tether
   - (01) After market harness/shield/tether added, not used
   - (02) After market harness/shield/tether used
   - (03) Child safety seat used, but no after market harness/shield/tether added
   - (09) Unknown if harness/shield/tether added or used

   Designed With Harness/Shield/Tether
   - (11) Harness/shield/tether not used
   - (12) Harness/shield/tether used
   - (19) Unknown if harness/shield/tether used

   Unknown If Designed With Harness/Shield/Tether
   - (21) Harness/shield/tether not used
   - (22) Harness/shield/tether used
   - (29) Unknown if harness/shield/tether used

   - (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
   (Specify make/model and occupant number)

   _____

   _____

   _____

   _____

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position
(0) No head restraints
(1) Integral — no damage
(2) Integral — damaged during accident
(3) Adjustable — no damage
(4) Adjustable — damaged during accident
(5) Add-on — no damage
(6) Add-on — damaged during accident
(8) Other
Specify):_____
(9) Unknown

B-Seat Type (this Occupant Position)
(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Box mounted seat (i.e., van type)
(10) Other seat type (specify):

(99) Unknown

C-Seat Orientation (this Occupant Position)
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):

(9) Unknown

D-Seat Track Adjusted Position Prior To Impact
(0) Occupant not seated or no seat
(1) Non-adjustable seat track

Adjustable Seat Track
(2) Seat at forward most track position
(3) Seat between forward most and middle track positions
(4) Seat at middle track position
(5) Seat between middle and rear most track positions
(6) Seat at rear most track position
(9) Unknown

E-Seat Back Incline Prior and Post Impact
(00) Occupant not seated or no seat
(01) Not adjustable

Upright prior to impact
(11) Moved to completely rearward position
(12) Moved to rearward midrange position
(13) Moved to slightly rearward position
(14) Retained pre-impact position
(15) Moved to slightly forward position
(16) Moved to forward midrange position
(17) Moved to completely forward position

Slightly reclined prior to impact
(21) Moved to completely rearward position
(22) Moved to rearward midrange position
(23) Retained pre-impact postion
(24) Moved to upright position
(25) Moved to slightly forward position
(26) Moved to forward midrange position
(27) Moved to completely forward position

Completely reclined prior to impact
(31) Retained pre-impact position
(32) Moved to rearward midrange position
(33) Moved to slightly rearward position
(34) Moved to upright position
(35) Moved to slightly forward position
(36) Moved to forward midrange position
(37) Moved to completely forward position

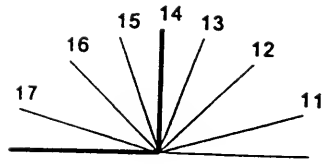
(99) Unknown

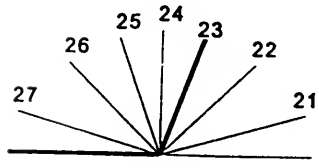
F-Seat Performance (this Occupant Position)
(0) Occupant not seated or no seat
(1) No seat performance failure(s)
(2) Seat adjusters failed
(3) Seat back folding locks or "seat back" failed (specify):

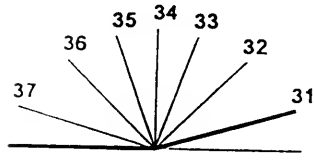
(4) Seat tracks/anchors failed
(5) Deformed by impact of occupant
(6) Deformed by passenger compartment intrusion (specify):
(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown







Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [X] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [X] Yes [ ]

Describe entrapment mechanism: _____

Component(s): _____

(Note on vehicle interior sketch)

NASS CDS INTERVIEW FORM:
CASE VEHICLE DRIVER

U S Department of Transportation

National Highway Traffic Safety Administration

INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 01

Interviewee(s) Role or Name(s): DRIVER & husband w/ AHNV

Phone number:

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

Going West on [redacted] St. Approaching intersection had gone around statue. I looked up and traffic was stopped. I hit BRAKES and steered to Left. And hit other CAR (L) REAR corner w/ my front right

HAD just left store 4 blocks away and we were on our way home. Just a few blocks from home

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

ACCORDING to driver & husband, Husband asked (SON) 9 yr old in RR seat if he saw RF occup. (Brother) hit WS or ROOF. RR occupant SAID RF occup never hit WS stayed in seat during CRASH

SPECIFIC QUESTIONS TO ASK INTERVIEWEE

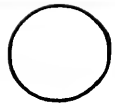
How was [redacted] laying / positioned post crash:

He was in his seat leaning to the left Head turned to Left

HS Form 433D (1/96)

Information collected in this report is used to complete HS Forms 433A and 433B. These reports are authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

CRASH DATA INFORMATION

IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	[X] Driver [ ] Other occupant [ ] Relative/friend
TRAVEL DIRECTION?	[ ] North [ ] South [ ] East [X] West (Or where were they coming from or going to?)
LANE?	[X] 1 [ ] 2 [ ] 3 [ ] 4 [ ] Other Note: lane 1 is the right curb lane
ROAD CONDITION?	[X] Dry [ ] Wet [ ] Snow [ ] Slush [ ] Ice [ ] Sand, dirt, oil [ ] Other (specify)
WEATHER CONDITIONS? (Check all that apply)	[X] No adverse conditions [ ] Rain [ ] Fog [ ] Sleet [ ] Hail [ ] Snow [ ] Other (specify)
SIGN OR SIGNAL PRESENT? (check all that apply)	[X] Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) [ ] Stop sign [ ] Yield sign [ ] School zone sign [ ] Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ [ ] Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: _____ [ ] Miscellaneous control (including railroad controls) specify: _____ [ ] None [ ] Unknown
WAS THE CONTROL FUNCTIONING PROPERLY?	[ ] No traffic control device present [ ] Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: [X] Functioning properly [ ] Unknown
SPEED BEFORE THE IMPACT? (in mph)	[ ] Stopped [X] 11-20 15 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 [ ] 21-30 [ ] 41-50 [ ] 61-70 [ ] Unknown
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	[X] Go straight [ ] Stopped [ ] Turn left [ ] Turn right [ ] Slow down [ ] Accelerate [ ] Back up [ ] Change lanes to right [ ] Other (specify): [ ] Change lanes to left up to intersection then turn (R)
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	[X] No [ ] Unknown [ ] Yes (describe)
AVOIDANCE ACTIONS?	[ ] None [X] Braking with lock-up [ ] Accelerating [ ] Unknown [ ] Braking without lock-up [X] Steering left [ ] Other- specify: [ ] Releasing brakes [ ] Steering right
LOCATION OF VEHICLE AT TIME OF IMPACT?	[X] Original travel lane [ ] Different travel lane [ ] In intersection [ ] Off roadway to right [ ] Off roadway to left [ ] Other (specify): _____
SPEED AT THE TIME OF IMPACT? (in mph)	[ ] Stopped [ ] 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 [ ] 21-30 [ ] 41-50 [ ] 61-70 [X] Unknown
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	

VEHICLE INFORMATION

ROLLOVER DATA

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

[ ] YES - - ASK THE FOLLOWING QUESTIONS

[X] NO - - SKIP TO "FIRE DATA" BELOW
[ ] UNKNOWN - - SKIP TO "FIRE DATA" BELOW

ROLLOVER BEGAN	[ ] On roadway [ ] On shoulder [ ] On roadside or median [ ] Unknown
ROLLOVER CAUSE?	[ ] Other vehicle (specify vehicle number) ____ [ ] Contact to object (specify): _____ [ ] Other cause (specify): _____ [ ] Unknown
DIRECTION OF VEHICLE ROLL?	[ ] Toward the right (passenger side) [ ] Toward the left (driver side) [ ] End-over-end [ ] Unknown
NUMBER OF TURNS	____ Number of QUARTER TURNS [ ] Unknown ____ Number of COMPLETE TURNS
PLANE IN CONTACT WITH GROUND AT FINAL REST?	[ ] Left side [ ] Top [ ] Right side [ ] Wheels [ ] Unknown

FIRE DATA

DID THIS VEHICLE EXPERIENCE A FIRE?

[ ] YES - - ASK THE FOLLOWING QUESTIONS

[X] NO - - SKIP THIS SECTION
[ ] UNKNOWN - - SKIP THIS SECTION

FIRE STARTED, OR SMOKE WAS FIRST SEEN ...	[ ] Under the hood [ ] In the trunk/cargo area [ ] Behind the instrument panel [ ] Under the vehicle [ ] In the passenger compartment [ ] From other involved vehicle [ ] Unknown
FIRE START WITH THE ELECTRICAL SYSTEM? [ ] No [ ] Unknown	[ ] Yes (specify):
FIRE START WITH THE FUEL SYSTEM? [ ] No [ ] Unknown	[ ] Yes - - specify Which part of the fuel system may have been involved? [ ] Fuel tank [ ] Fuel lines [ ] Engine compartment (specify component if known) [ ] Unknown

Describe any additional rollover or fire information here:

ADDITIONAL VEHICLE INFORMATION

YEAR, MAKE AND MODEL?	Year: 19 9 5 Make: FORD Model: MUSTANG
PREVIOUS OR POST-CRASH DAMAGE?	[X] No [ ] Yes - describe: [ ] Unknown
DOORS OR HATCH OPEN DURING THE CRASH?	[X] No [ ] Yes [ ] LF [ ] RF [ ] LR [ ] RR [ ] HATCH [ ] OTHER _____ [ ] Unknown
WINDOWS BREAK DURING THE CRASH?	[ ] No **Check all that apply** [X] Yes [X] WS [ ] LF [ ] RF [ ] LR [ ] RR [ ] BL [ ] Roof [ ] Other [ ] Unknown
WINDOW PRECRASH STATUS	[ ] WS [C] LF [C] RF [ ] LR [ ] RR [ ] BL [ ] Roof [ ] Other "O" = open "C" = Closed "P" = partially open "U" = Unknown
GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?	[ ] No [ ] Yes - describe: [X] Unknown
CARGO IN THE VEHICLE?	[ ] No [ ] Unknown [X] Yes - describe: 3 bags of clothes Approximate weight - 25 pounds 11.3 kg
VEHICLE MILEAGE	_____ miles [X] Unknown
IF VEHICLE HAS NOT BEEN INSPECTED	**Current location of the vehicle:** _____ _____ **Contact person:** _____

Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location:

SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION	
Do you recall the type of development in the area of the crash?	[ ] Residential [X] Commercial [ ] Industrial [ ] Agricultural [ ] Undeveloped [ ] School [ ] Other: _____
What were the weather conditions at the time of the crash?	[X] Clear (no clouds, no precipitation) [ ] Cloudy (partially cloudy, no precipitation) [ ] Overcast (full cloud cover, no precipitation) [ ] Precipitating [ ] Unknown
What was the type of precipitation?	[X] No precipitation [ ] Unknown [ ] Raining [ ] Freezing rain [ ] Sleeting [ ] Snowing [ ] Hailing
What was the condition of the road surface?	[X] Dry [ ] Wet [ ] Snowy, slushy [ ] Icy [ ] Other (e.g., sand, dirt, oil on surface, etc.) [ ] Unknown
How would you describe the amount of traffic at the time of the crash?	[X] Heavy [ ] Moderate [ ] Light [ ] No other traffic present
What is your occupation?	[ ] Professional [ ] Technical [ ] Government official [ ] Management [ ] Proprietors [ ] Sales [ ] Clerical [ ] Craftsman and foreman [ ] Service worker [X] Student [ ] Farmers and farm-managers [ ] Farm labors and foreman [ ] Private household worker [ ] Housewife [ ] Other: _____
How long have you driven this vehicle?	Years: 1 Months: _____
How many miles do you think that you have driven it in the last 12-month period?	Miles: 18,000 bought w/ 31'000 HAS 49,000
How often do you drive this particular roadway?	[X] Daily [ ] Twice weekly [ ] Once weekly [ ] Twice monthly [ ] Once monthly [ ] Very infrequently [ ] First time on road
Where were you coming from just prior to the crash?	[ ] Home [ ] Work [ ] School [X] Shopping [ ] Social/recreational [ ] Restaurant [ ] Personal business [ ] Other: _____
Where were you intending to go when the crash occurred?	[X] Home [ ] Work [ ] School [ ] Shopping [ ] Social/recreational [ ] Restaurant [ ] Personal business [ ] Other: _____

OCCUPANT DATA QUESTIONS

HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
SEATING POSITION? Front Left (FL) Second Left (2L) Front Middle (FM) Second Middle (2M) Front Right (FR) Second Right (2R) Third Left (3L) Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	FRONT LEFT	FR	2R
SEX, HEIGHT, WEIGHT, AND AGE? **CIRCLE DRIVER'S RACE:** (White) Black American Indian Eskimo or Aleut Asian or Pacific Islander Other (specify): Unknown	[ ] M [X] F - Not pregnant [ ] F - Pregnant - # of months ____ [ ] F - Unk. if pregnant HEIGHT: 5' 4" (152.4) WEIGHT: 130 (59.0) AGE: 29 DRIVER OF HISPANIC ORIGIN? [ ] Y [X] N [ ] U	[X] M [ ] F - Not pregnant [ ] F - Pregnant - # of months ____ [ ] F - Unk. if pregnant HEIGHT: 46" (116.8) WEIGHT: 50 (22?) AGE: 6 ⊠	[X] M [ ] F - Not pregnant [ ] F - Pregnant - # of months ____ [ ] F - Unk. if pregnant HEIGHT: 54" (137.2) WEIGHT: 84 (38.1) AGE: 9 ⊠
OCCUPANT POSTURE A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H Unknown	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above	[X] Leaning to left [ ] Leaning to right [ ] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above
FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT **FEET** A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown **HANDS / ARMS** F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) MI Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed (A) -- (F) OR (B) on stick not sure	Indicate all letters that apply and further describe as needed hanging over seat. UNK.	Indicate all letters that apply and further describe as needed hanging over seat UNK

OCCUPANT DATA CONTINUED ON NEXT PAGE

OCCUPANT DATA QUESTIONS (continued)

	DRIVER	OCCUPANT # 2	OCCUPANT # __
BACK UP AGAINST THE SEAT BACK?	[ ] No (describe) [X] Yes [ ] Unknown	[ ] No (describe) [X] Yes [ ] Unknown	[ ] No (describe) [ ] Yes [X] Unknown
ADJUSTABLE SEAT *TRACK*, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?	[ ] Not adjustabie [ ] Seat all the way forward [X] Between forward and middle [ ] At middle position [ ] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown	[ ] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [X] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown	[X] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [ ] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown
ADJUSTABLE SEAT *BACK*, IF "YES" WHERE WAS THE *BACK* PRE AND POST IMPACT	PRE POST [ ] [ ] Not adjustable [ ] [ ] Completely upright [X] [X] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown	PRE POST [ ] [ ] Not adjustable [ ] [ ] Completely upright [X] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown	PRE POST [X] [ ] Not adjustable [ ] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown

TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT

[ ] Not adjustable [ ] Full up [ ] Between full up and center
[ ] Center [X] Between center and full down
[ ] Full down [ ] Unknown

TELESCOPING STEERING COLUMN PRIOR TO IMPACT

[X] Not adjustable [ ] Full back [ ] Between full back and midpoint
[ ] Midpoint [ ] Between midpoint and full forward
[ ] Full forward [ ] Unknown

Did this vehicle have a cellular phone in it during the crash?

[X] No
[ ] Yes - describe type: _____
(e.g., portable, mounted in vehicle, flip phone, etc.)
[ ] Unknown

(Note to researcher: try to determine any driver distractions without implying fault)

Was the driver doing any of the following? **(check all that apply - and specify)**

[X] Talking to or listening to another occupant (specify):
[ ] Was there a moving object in vehicle (specify):
[ ] Talking or listening on a cellular phone (specify):
[ ] Dialing a cellular phone (specify):
[ ] Adjusting climate control (specify):
[ ] Adjusting radio, CD or cassette player (specify):
[ ] Using other device or object in vehicle (specify):
[ ] Sleepy / asleep (specify):
[ ] Distracted by outside person, object, or event (specify):
[ ] Eating or drinking (specify):
[ ] Smoking related (specify):
[ ] Other (specify):
[ ] Unknown

RESTRAINT INFORMATION

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
TYPE OF SEAT BELT AVAILABLE NOTE: If a belt is not available for a seat position -- describe reason	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:
DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT? (i.e., 2 - point automatic belt)	[ ] Unknown [X] No [ ] Yes * —	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [ ] No [ ] Yes * N/A
* IF "YES", WERE THEY WORKING PROPERLY?	[ ] Yes [ ] No (describe)	[ ] Yes [ ] No (describe)	[ ] Yes [ ] No (describe)
ARE ANY BELTS ATTACHED TO THE DOOR? (i.e., 3 - point automatic belt)	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [ ] No [ ] Yes * N/A
* IF "YES", DOES IT CROSS:	___ Chest ___ Lap ___ Both	___ Chest ___ Lap ___ Both	___ Chest ___ Lap ___ Both
OCCUPANT WEARING ANY SEATBELT?	[ ] No [X] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown

SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN

TYPE OF BELT WORN?	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown
LAP BELT SITUATED?	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ _____ [ ] Unknown	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ _____ [ ] Unknown	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ _____ [ ] Unknown
SHOULDER BELT SITUATED?	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____ _____ [ ] Unknown	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____ _____ [ ] Unknown	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____ _____ [ ] Unknown

Describe any breaks, tears, or failures to any of the seat belts:

I unlatched [redacted] belts then attempted to open door but couldn't so I got out and went around to open door

EJECTION, ENTRAPMENT, MOBILITY INFORMATION

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
ANYONE PINNED IN THE VEHICLE?	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment
HOW DID OCCUPANT(S) EXIT THE VEHICLE?	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [X] Exited under own power [ ] Fully ejected [ ] Unknown	[ ] Fatal before removed [X] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [ ] Exited under own power [ ] Fully ejected [ ] Unknown	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [X] Exited under own power [ ] Fully ejected [ ] Unknown

Further describe any ejection, entrapment, or mobility information here:

How did occupant(s) depart the crash scene?			
	[X] Ambulance	[X] Ambulance	[ ] Ambulance
	[ ] Police or Tow vehicle	[ ] Police or Tow vehicle	[ ] Police or Tow vehicle
	[ ] Relative (specify)	[ ] Relative (specify)	[X] Relative (specify) GRANDFATHER CAME.
	[ ] Friend (specify)	[ ] Friend (specify)	[ ] Friend (specify)
	[ ] Other (specify)	[ ] Other (specify)	[ ] Other (specify)

AIR BAG INFORMATION

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

[X] YES (IF "YES" COMPLETE THIS SECTION)
[ ] NO [ ] UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # ___	"OTHER" AIR BAG SPECIFY: ___ OCCUPANT # ___
VEHICLE BEEN IN ANY PREVIOUS CRASHES? [ ] NO [ ] YES - continue to right [X] UNKNOWN - go to box below not that they know of	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] > 1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] > 1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] > 1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED
TYPE OF AIR BAG?	[ ] Original equipment [ ] Retrofitted [ ] Replacement [X] Unknown	[ ] Original equipment [ ] Retrofitted [ ] Replacement [X] Unknown	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown
PRIOR SERVICE ON THE AIR BAG SYSTEM?	[X] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:
DID AIR BAG INFLATE DURING THIS CRASH?	[X] Yes [ ] Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk	[ ] Yes [ ] Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk	[ ] Yes [ ] Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk
WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?	[X] No [ ] Unknown [ ] Yes - Specify:	[X] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:
WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?	[X] No [ ] Unknown [ ] Yes - Specify:	[X] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:

Describe any additional information here:

CHILD SAFETY SEAT INFORMATION

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

[ ] YES (IF "YES" COMPLETE THIS SECTION)

[X] NO [ ] UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # ___	OCCUPANT # ___
MAKE AND MODEL OF THE SAFETY SEAT?			
TYPE OF SEAT?		[ ] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown	[ ] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown
DIRECTION FACING PRIOR TO THE CRASH?		[ ] Front [ ] Rearward [ ] Unknown	[ ] Front [ ] Rearward [ ] Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		[ ] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		[ ] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown	[ ] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		[ ] Harness [ ] Shield [ ] Tether [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		[ ] Harness [ ] Shield [ ] Tether [ ] None [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] None [ ] Unknown

Describe any additional information here:
when I opened door he was leaning to left
Head turned to Left.

INJURY INFORMATION

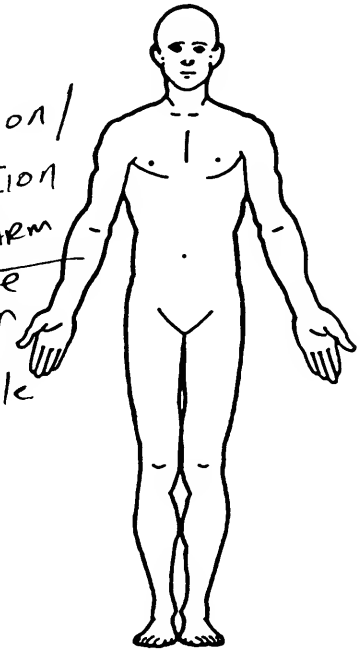
	DRIVER	OCCUPANT # 2	OCCUPANT # 3
WERE YOU INJURED? ▸ *If "YES" go to manikin page and record injuries in detail* ▸ *If "NO" ask next questions*	[ ] No [X] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown
DID YOU HAVE ANY OF THE FOLLOWING: *(If any injuries are checked, go to the manikin page and record location, lesion, and source)*	[ ] Cuts [X] Abrasions [X] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other - specify on manikin	[ ] Cuts [X] Abrasions [ ] Bruises [X] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other - specify on manikin	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other - specify on manikin
TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?	[X] No [ ] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
RECEIVE ANY MEDICAL TREATMENT? (check all that apply)	[ ] Hospital (NO) [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown
HOSPITALIZED?	[X] No [ ] Yes - # of days _____ [ ] Unknown	[ ] No [ ] Yes - # of days _____ [ ] Unknown	[ ] No [ ] Yes - # of days _____ [ ] Unknown
TREATED AND RELEASED FROM THE EMERGENCY ROOM?	[X] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
NAME OF MEDICAL TREATMENT FACILITY?		[redacted]	
RECEIVE ANY FOLLOW-UP TREATMENT?	[X] No [ ] Yes - describe any additional injuries diagnosed: _____ _____ [ ] Unknown	[ ] No [ ] Yes - describe any additional injuries diagnosed: _____ _____ [ ] Unknown	[ ] No [ ] Yes - describe any additional injuries diagnosed: _____ _____ [ ] Unknown
LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?	[ ] No [ ] Not working prior to crash [X] Yes - # of days _____ [ ] Unknown	[ ] No [X] Not working prior to crash [ ] Yes - # of days _____ [ ] Unknown	[ ] No [X] Not working prior to crash [ ] Yes - # of days _____ [ ] Unknown
IF REQUIRED: **WILL YOU SIGN A MEDICAL RELEASE?** * *If not an in-person interview, make appointment to have release signed*	[ ] No [ ] Yes* [ ] Unknown DATE: _____ TIME: _____ PLACE: _____	[X] No [ ] Yes* [ ] Unknown DATE: _____ TIME: _____ PLACE: _____	[ ] No [ ] Yes* [ ] Unknown DATE: _____ TIME: _____ PLACE: _____

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 01 Occupant Number 01

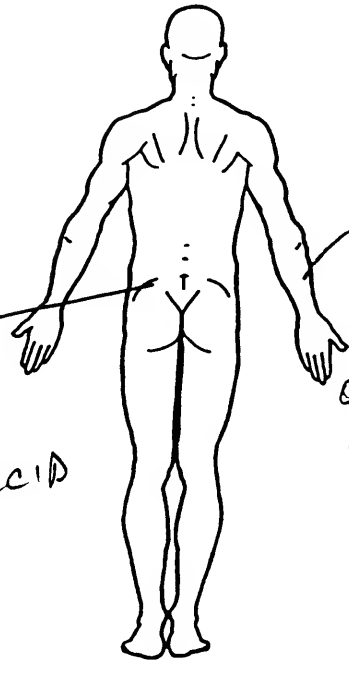
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

SOFT TISSUE/INTERNAL INJURIES



ABRASION / LACERATION (R) FOREARM hit coke CAN in center console

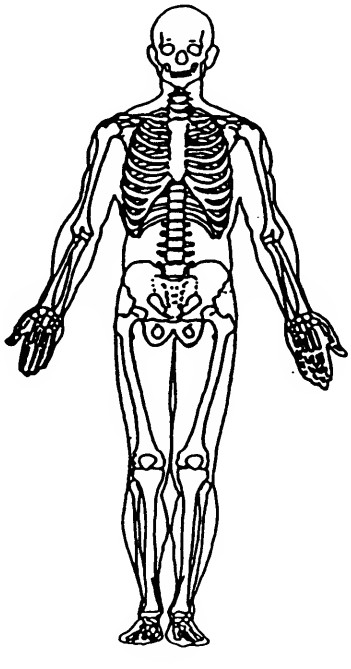


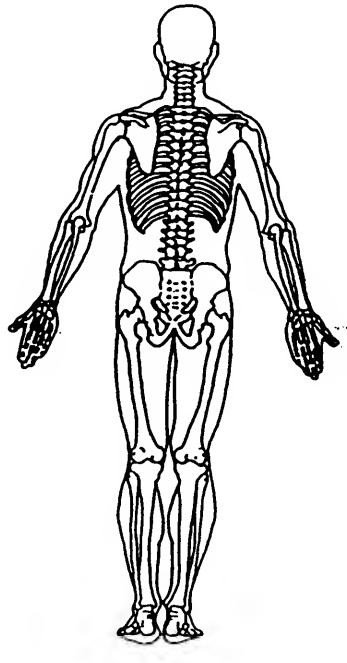
LOWER BACK PAIN 3 DAYS POST ACCID

Contusion (R) forearm around site of laceration

Observed by SCI investigator

SKELETAL INJURIES





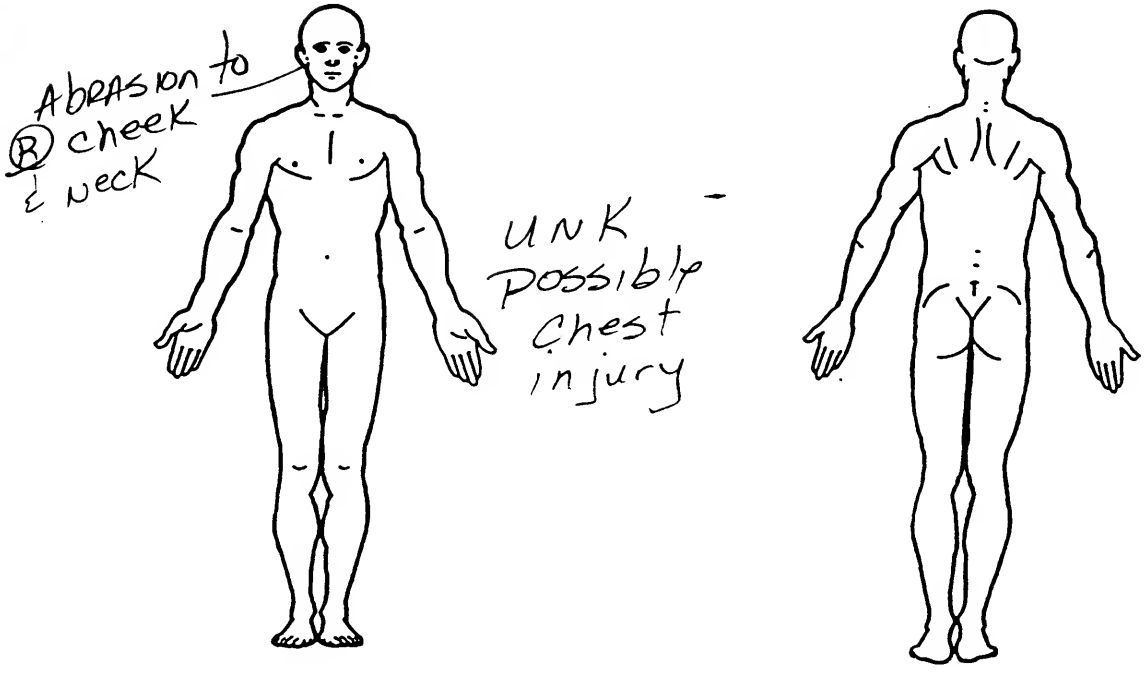
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 01 Occupant Number 02

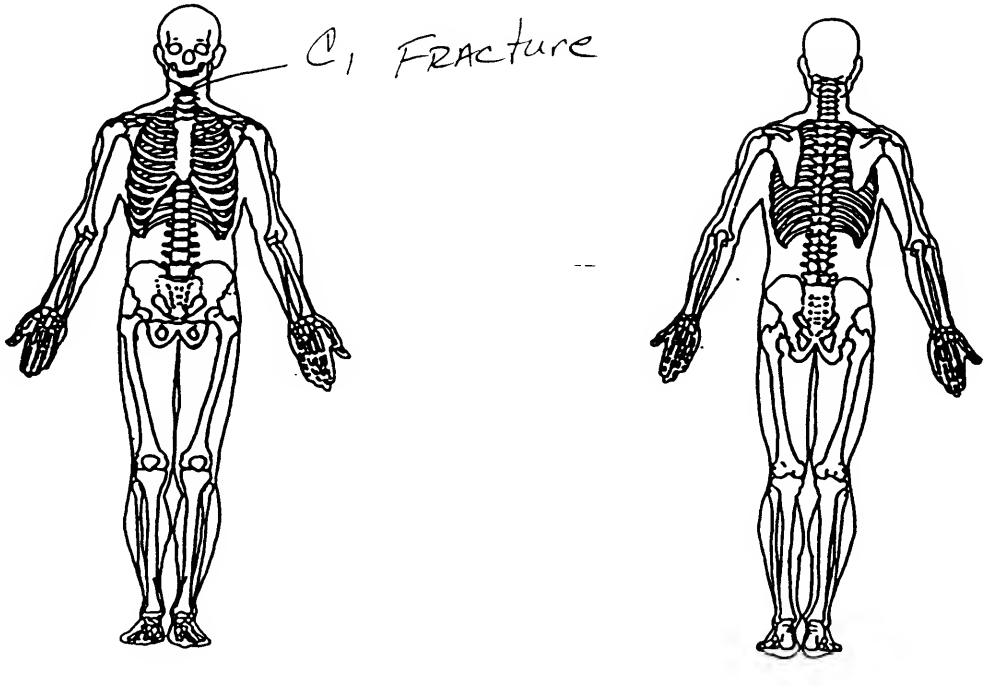
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): MOTHER/DRIVER

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



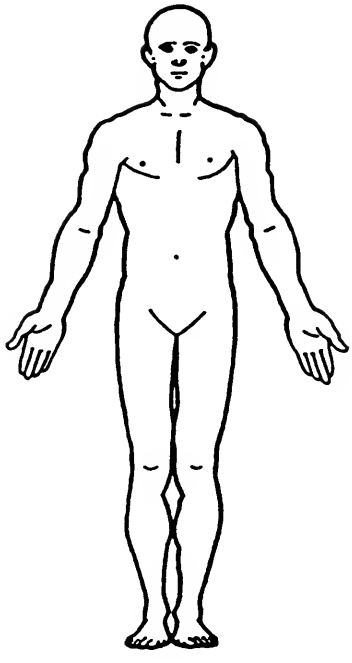
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 01 Occupant Number 03

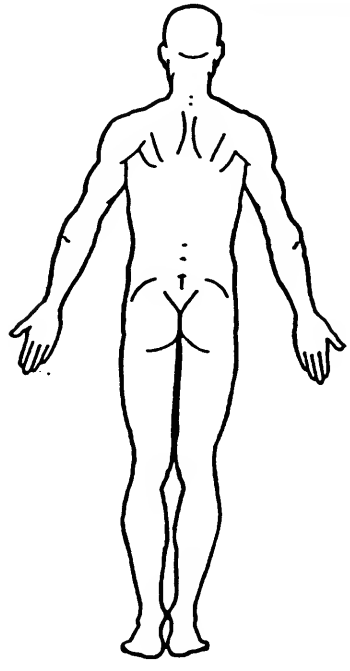
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): MOTHER/DRIVER

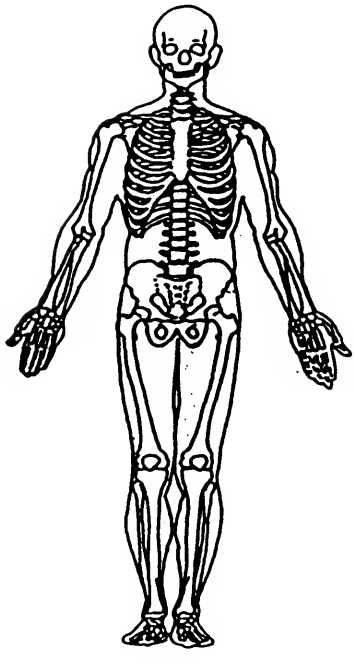
SOFT TISSUE/INTERNAL INJURIES

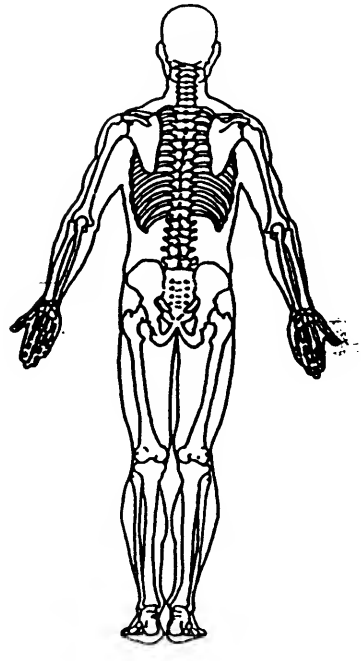


NONE PER MOTHER



SKELETAL INJURIES





The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

NASS CDS INTERVIEW FORM:
VEHICLE #2 DRIVER

U.S Department of Transportation

National Highway Traffic Safety Administration

INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 02

Interviewee(s) Role or Name(s): DRIVER

Phone number:

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

I was WB on [redacted] St I was stopped waiting for light to change I was observing traffic out of RV mirror. I saw black car approaching it looked like driver looking towards passenger. When she looked up she tried to dodge me by going into (2) turn lane. She struck her (R) Front w/ my (L) REAR I got out approached Rear to observe damage when I observed driver getting out in a PANIC My wife also got out & went to check on women My wife & driver went to PASS side and mother opened door

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

Right before impact I saw child moving forward hit WS then bag came out.

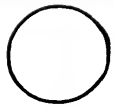
SPECIFIC QUESTIONS TO ASK INTERVIEWEE

How was child positioned in car?
Child laying to left over center console
AIR bag on his face
Did you notice belt? I didn't look for it and I didn't notice it.

HS Form 433D (1/96)

Information collected in this report is used to complete HS Forms 433A and 433B. These reports are authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

CRASH DATA INFORMATION

IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	[X] Driver [ ] Other occupant [ ] Relative/friend
TRAVEL DIRECTION?	[ ] North [ ] South [ ] East [X] West (Or where were they coming from or going to?)
LANE?	[X] 1 [ ] 2 [ ] 3 [ ] 4 [ ] Other Note: lane 1 is the right curb lane
ROAD CONDITION?	[X] Dry [ ] Wet [ ] Snow [ ] Slush [ ] Ice [ ] Sand, dirt, oil [ ] Other (specify)
WEATHER CONDITIONS? (Check all that apply)	[X] No adverse conditions [ ] Rain [ ] Fog [ ] Sleet [ ] Hail [ ] Snow [ ] Other (specify)
SIGN OR SIGNAL PRESENT? (check all that apply)	[X] Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) [ ] Stop sign [ ] Yield sign [ ] School zone sign [ ] Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ [ ] Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: _____ [ ] Miscellaneous control (including railroad controls) specify: _____ [ ] None [ ] Unknown
WAS THE CONTROL FUNCTIONING PROPERLY?	[X] No traffic control device present [ ] Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: [ ] Functioning properly [ ] Unknown
SPEED BEFORE THE IMPACT? (in mph)	[X] Stopped [ ] 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 [ ] 21-30 [ ] 41-50 [ ] 61-70 [ ] Unknown
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	[X] Go straight [ ] Stopped [ ] Turn left [ ] Turn right [ ] Slow down [ ] Accelerate [ ] Back up [ ] Change lanes to right [ ] Other (specify): [ ] Change lanes to left
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	[X] No [ ] Unknown [ ] Yes (describe)
AVOIDANCE ACTIONS?	[X] None [ ] Braking with lock-up [ ] Accelerating [ ] Unknown [ ] Braking without lock-up [ ] Steering left [ ] Other- specify: [ ] Releasing brakes [ ] Steering right
LOCATION OF VEHICLE AT TIME OF IMPACT?	[X] Original travel lane [ ] Different travel lane [ ] In intersection [ ] Off roadway to right [ ] Off roadway to left [ ] Other (specify): _____
SPEED AT THE TIME OF IMPACT? (in mph)	[X] Stopped [ ] 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 [ ] 21-30 [ ] 41-50 [ ] 61-70 [ ] Unknown
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	

VEHICLE INFORMATION

ROLLOVER DATA

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

[ ] YES - - ASK THE FOLLOWING QUESTIONS

[X] NO - - SKIP TO "FIRE DATA" BELOW
[ ] UNKNOWN - - SKIP TO "FIRE DATA" BELOW

ROLLOVER BEGAN	[ ] On roadway [ ] On shoulder [ ] On roadside or median [ ] Unknown
ROLLOVER CAUSE?	[ ] Other vehicle (specify vehicle number) ____ [ ] Contact to object (specify):_____ [ ] Other cause (specify):_____ [ ] Unknown
DIRECTION OF VEHICLE ROLL?	[ ] Toward the right (passenger side) [ ] Toward the left (driver side) [ ] End-over-end [ ] Unknown
NUMBER OF TURNS	____ Number of QUARTER TURNS [ ] Unknown ____ Number of COMPLETE TURNS
PLANE IN CONTACT WITH GROUND AT FINAL REST?	[ ] Left side [ ] Top [ ] Right side [ ] Wheels [ ] Unknown

FIRE DATA

DID THIS VEHICLE EXPERIENCE A FIRE?

[ ] YES - - ASK THE FOLLOWING QUESTIONS

[X] NO - - SKIP THIS SECTION
[ ] UNKNOWN - - SKIP THIS SECTION

FIRE STARTED, OR SMOKE WAS FIRST SEEN ...	[ ] Under the hood [ ] In the trunk/cargo area [ ] Behind the instrument panel [ ] Under the vehicle [ ] In the passenger compartment [ ] From other involved vehicle [ ] Unknown
FIRE START WITH THE ELECTRICAL SYSTEM? [ ] No [ ] Unknown	[ ] Yes (specify):
FIRE START WITH THE FUEL SYSTEM? [ ] No [ ] Unknown	[ ] Yes - - specify Which part of the fuel system may have been involved? [ ] Fuel tank [ ] Fuel lines [ ] Engine compartment (specify component if known) [ ] Unknown

Describe any additional rollover or fire information here:

ADDITIONAL VEHICLE INFORMATION

YEAR, MAKE AND MODEL?	Year: 19 9 1 Make: FORD Model: EXPLORER XL
PREVIOUS OR POST-CRASH DAMAGE?	[ ] No [X] Yes - describe: Windshield [ ] Unknown
DOORS OR HATCH OPEN DURING THE CRASH?	[X] No [ ] Yes [ ] LF [ ] RF [ ] LR [ ] RR [ ] HATCH [ ] OTHER _____ [ ] Unknown
WINDOWS BREAK DURING THE CRASH?	[X] No Check all that apply [ ] Yes [ ] WS [ ] LF [ ] RF [ ] LR [ ] RR [ ] BL [ ] Roof [ ] Other [ ] Unknown
WINDOW PRECRASH STATUS	All closed [ ] WS [ ] LF [ ] RF [ ] LR [ ] RR [ ] BL [ ] Roof [ ] Other "O" = open "C" = Closed "P" = partially open "U" = Unknown
GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?	[X] No [ ] Yes - describe: [ ] Unknown
CARGO IN THE VEHICLE?	[ ] No [ ] Unknown [ ] Yes - describe: stroller, Diaper bag Approximate weight - 10 pounds 4.5 kg → 5
VEHICLE MILEAGE	_____ miles [X] Unknown
IF VEHICLE HAS NOT BEEN INSPECTED	Current location of the vehicle: _____ _____ Contact person: _____

Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location:

SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION	
Do you recall the type of development in the area of the crash?	[ ] Residential [X] Commercial [ ] Industrial [ ] Agricultural [ ] Undeveloped [ ] School [ ] Other: _____
What were the weather conditions at the time of the crash?	[X] Clear (no clouds, no precipitation) [ ] Cloudy (partially cloudy, no precipitation) [ ] Overcast (full cloud cover, no precipitation) [ ] Precipitating [ ] Unknown
What was the type of precipitation?	[X] No precipitation [ ] Unknown [ ] Raining [ ] Freezing rain [ ] Sleeting [ ] Snowing [ ] Hailing
What was the condition of the road surface?	[X] Dry [ ] Wet [ ] Snowy, slushy [ ] Icy [ ] Other (e.g., sand, dirt, oil on surface, etc.) [ ] Unknown
How would you describe the amount of traffic at the time of the crash?	[X] Heavy [ ] Moderate [ ] Light [ ] No other traffic present
What is your occupation?	[ ] Professional [ ] Technical [X] Government official [ ] Management [ ] Proprietors [ ] Sales [ ] Clerical [ ] Craftsman and foreman [ ] Service worker [ ] Student Co. Sheriff [ ] Farmers and farm-managers [ ] Farm labors and foreman [ ] Private household worker [ ] Housewife [ ] Other: _____
How long have you driven this vehicle?	Years: 5 Months: _____
How many miles do you think that you have driven it in the last 12-month period?	Miles: 3000 ERRAND VEH.
How often do you drive this particular roadway?	[X] Daily [ ] Twice weekly [ ] Once weekly [ ] Twice monthly [ ] Once monthly [ ] Very infrequently [ ] First time on road
Where were you coming from just prior to the crash?	[X] Home [ ] Work [ ] School [ ] Shopping [ ] Social/recreational [ ] Restaurant [ ] Personal business [ ] Other: _____
Where were you intending to go when the crash occurred?	[ ] Home [ ] Work [ ] School [X] Shopping [ ] Social/recreational [ ] Restaurant [ ] Personal business [ ] Other: _____

OCCUPANT DATA QUESTIONS

HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
SEATING POSITION? Front Left (FL) — Second Left (2L) Front Middle (FM) — Second Middle (2M) Front Right (FR) — Second Right (2R) Third Left (3L) — Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	FRONT LEFT	FR	2L
SEX, HEIGHT, WEIGHT, AND AGE? **CIRCLE DRIVER'S RACE:** (White) Black American Indian Eskimo or Aleut Asian or Pacific Islander Other (specify): Unknown	[X] M [ ] F - Not pregnant [ ] F - Pregnant - # of months ____ [ ] F - Unk. if pregnant HEIGHT: 5'11" 180.3 WEIGHT: 260 117.9 AGE: 39 DRIVER OF HISPANIC ORIGIN? [ ] Y [X] N [ ] U	[ ] M [X] F - Not pregnant [ ] F - Pregnant - # of months ____ [ ] F - Unk. if pregnant HEIGHT: 5'7" 170.2 WEIGHT: 161 75.9 AGE: 40	[X] M [ ] F - Not pregnant [ ] F - Pregnant - # of months ____ [ ] F - Unk. if pregnant HEIGHT: 5'9" 175.3 WEIGHT: 170 77.1 AGE: 13
OCCUPANT POSTURE A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H Unknown	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above
FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT **FEET** A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown **HANDS / ARMS** F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed (A) I on BRAKE (F)	Indicate all letters that apply and further describe as needed (A) ON LAP UNK	Indicate all letters that apply and further describe as needed (A) UNK

OCCUPANT DATA CONTINUED ON NEXT PAGE

OCCUPANT DATA QUESTIONS (continued)

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
BACK UP AGAINST THE SEAT BACK?	[X] No (describe) [ ] Yes [ ] Unknown	[X] No (describe) [ ] Yes [ ] Unknown	[X] No (describe) [ ] Yes [ ] Unknown
ADJUSTABLE SEAT *TRACK*, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?	[ ] Not adjustabie [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [X] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown	[ ] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [X] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown	[X] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [ ] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown
ADJUSTABLE SEAT *BACK*, IF "YES" WHERE WAS THE *BACK* PRE AND POST IMPACT	PRE POST [ ] [ ] Not adjustable [X] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown	PRE POST [ ] [ ] Not adjustable [X] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown	PRE POST [X] [X] Not adjustable [ ] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown

TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT
[ ] Not adjustable [X] Full up [ ] Between full up and center
[ ] Center [ ] Between center and full down
[ ] Full down [ ] Unknown

TELESCOPING STEERING COLUMN PRIOR TO IMPACT
[X] Not adjustable [ ] Full back [ ] Between full back and midpoint
[ ] Midpoint [ ] Between midpoint and full forward
[ ] Full forward [ ] Unknown

Did this vehicle have a cellular phone in it during the crash?
[X] No
[ ] Yes - describe type: _____
(e.g., portable, mounted in vehicle, flip phone, etc.)
[ ] Unknown

(Note to researcher: try to determine any driver distractions without implying fault)

Was the driver doing any of the following? **(check all that apply - and specify)**

[ ] Talking to or listening to another occupant (specify):
[ ] Was there a moving object in vehicle (specify):
[ ] Talking or listening on a cellular phone (specify):
[ ] Dialing a cellular phone (specify):
[ ] Adjusting climate control (specify):
[ ] Adjusting radio, CD or cassette player (specify):
[ ] Using other device or object in vehicle (specify):
[ ] Sleepy / asleep (specify):
[ ] Distracted by outside person, object, or event (specify):
[ ] Eating or drinking (specify):
[ ] Smoking related (specify):
[ ] Other (specify):
[ ] Unknown

MID
25"
23lbs
5mo

2R
5'7"
123lbs
22

RESTRAINT INFORMATION

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
TYPE OF SEAT BELT AVAILABLE NOTE: If a belt is not available for a seat position -- describe reason	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:
DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT? (i.e., 2 - point automatic belt)	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [ ] No [ ] Yes * N/A
* IF "YES", WERE THEY WORKING PROPERLY?	[ ] Yes [ ] No (describe)	[ ] Yes [ ] No (describe)	[ ] Yes [ ] No (describe)
ARE ANY BELTS ATTACHED TO THE DOOR? (i.e., 3 - point automatic belt)	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [ ] No [ ] Yes * N/A
* IF "YES", DOES IT CROSS:	___ Chest ___ Lap ___ Both	___ Chest ___ Lap ___ Both	___ Chest ___ Lap ___ Both
OCCUPANT WEARING ANY SEATBELT?	[ ] No [X] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown

SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN

TYPE OF BELT WORN?	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown
LAP BELT SITUATED?	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ _____ [ ] Unknown	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ _____ [ ] Unknown	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ _____ [ ] Unknown
SHOULDER BELT SITUATED?	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____ _____ [ ] Unknown	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____ _____ [ ] Unknown	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____ _____ [ ] Unknown

Describe any breaks, tears, or failures to any of the seat belts:

EJECTION, ENTRAPMENT, MOBILITY INFORMATION

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
ANYONE PINNED IN THE VEHICLE?	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment
HOW DID OCCUPANT(S) EXIT THE VEHICLE?	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [X] Exited under own power [ ] Fully ejected [ ] Unknown	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [X] Exited under own power [ ] Fully ejected [ ] Unknown	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [X] Exited under own power [ ] Fully ejected [ ] Unknown

Further describe any ejection, entrapment, or mobility information here:

How did occupant(s) depart the crash scene?			
DROVE AWAY	[ ] Ambulance [ ] Police or Tow vehicle [ ] Relative (specify) [ ] Friend (specify) [ ] Other (specify)	[ ] Ambulance [ ] Police or Tow vehicle [ ] Relative (specify) [ ] Friend (specify) [ ] Other (specify)	[ ] Ambulance [ ] Police or Tow vehicle [ ] Relative (specify) [ ] Friend (specify) [ ] Other (specify)

AIR BAG INFORMATION

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

[ ] YES (IF "YES" COMPLETE THIS SECTION)
[X] NO [ ] UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # ___	"OTHER" AIR BAG SPECIFY: ______ ______ OCCUPANT # ___
VEHICLE BEEN IN ANY PREVIOUS CRASHES? [ ] NO [ ] YES - continue to right [ ] UNKNOWN - go to box below	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] >1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] >1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] >1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED
TYPE OF AIR BAG?	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown
PRIOR SERVICE ON THE AIR BAG SYSTEM?	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ]Unknown [ ] Yes - Specify:
DID AIR BAG INFLATE DURING THIS CRASH?	[ ] Yes [ ]Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk	[ ] Yes [ ]Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk	[ ] Yes [ ]Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk
WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:
WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:

Describe any additional information here:

CHILD SAFETY SEAT INFORMATION

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

[ ] YES (IF "YES" COMPLETE THIS SECTION)

[X] NO [ ] UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # ___	OCCUPANT # ___
MAKE AND MODEL OF THE SAFETY SEAT?			
TYPE OF SEAT?		[ ] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown	[ ] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown
DIRECTION FACING PRIOR TO THE CRASH?		[ ] Front [ ] Rearward [ ] Unknown	[ ] Front [ ] Rearward [ ] Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		[ ] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		[ ] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown	[ ] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		[ ] Harness [ ] Shield [ ] Tether [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		[ ] Harness [ ] Shield [ ] Tether [ ] None [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] None [ ] Unknown

Describe any additional information here:

INJURY INFORMATION

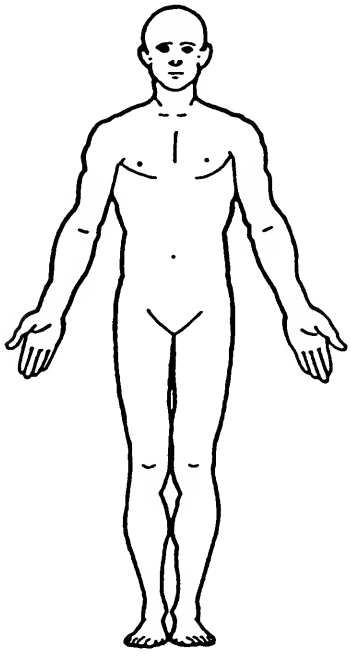
	DRIVER	OCCUPANT # 2	OCCUPANT # 3
WERE YOU INJURED? ▸ *If "YES" go to manikin page and record injuries in detail* ▸ *If "NO" ask next questions*	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown
DID YOU HAVE ANY OF THE FOLLOWING: *(If any injuries are checked, go to the manikin page and record location, lesion, and source)*	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other - specify on manikin	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other - specify on manikin	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other - specify on manikin
TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown
RECEIVE ANY MEDICAL TREATMENT? (check all that apply)	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown
HOSPITALIZED?	[X] No [ ] Yes - # of days ____ [ ] Unknown	[X] No [ ] Yes - # of days ____ [ ] Unknown	[X] No [ ] Yes - # of days ____ [ ] Unknown
TREATED AND RELEASED FROM THE EMERGENCY ROOM?	[ ] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
NAME OF MEDICAL TREATMENT FACILITY?			
RECEIVE ANY FOLLOW-UP TREATMENT?	[X] No [ ] Yes - describe any additional injuries diagnosed: ____ [ ] Unknown	[X] No [ ] Yes - describe any additional injuries diagnosed: ____ [ ] Unknown	[X] No [ ] Yes - describe any additional injuries diagnosed: ____ [ ] Unknown
LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?	[X] No [ ] Not working prior to crash [ ] Yes - # of days ____ [ ] Unknown	[X] No [ ] Not working prior to crash [ ] Yes - # of days ____ [ ] Unknown	[X] No [ ] Not working prior to crash [ ] Yes - # of days ____ [ ] Unknown
IF REQUIRED: **WILL YOU SIGN A MEDICAL RELEASE?** * *If not an in-person interview, make appointment to have release signed*	[ ] No [ ] Yes* [ ] Unknown DATE: ____ TIME: ____ PLACE: ____	[ ] No [ ] Yes* [ ] Unknown DATE: ____ TIME: ____ PLACE: ____	[ ] No [ ] Yes* [ ] Unknown DATE: ____ TIME: ____ PLACE: ____

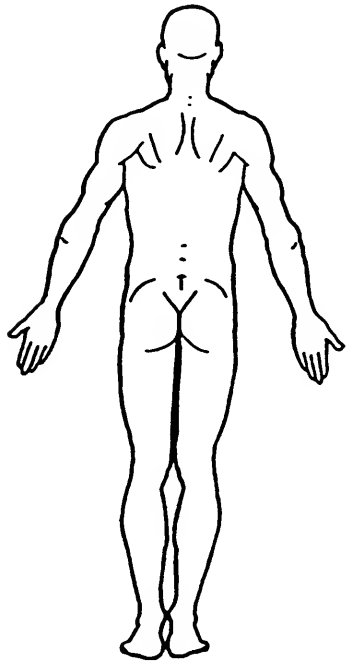
PSU Number 10 Case Number—Stratum 9625 Vehicle Number 02 Occupant Number 01

INJURY DATA FROM INTERVIEWEE(S)

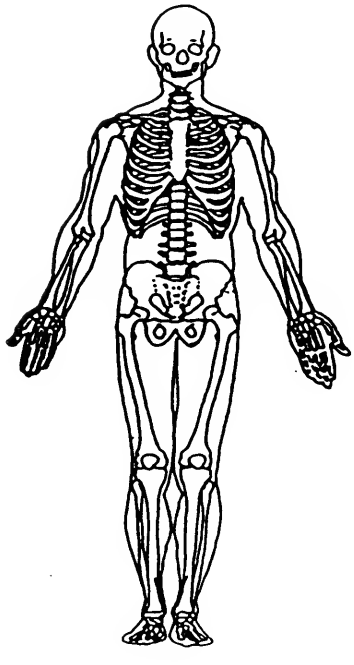
Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver

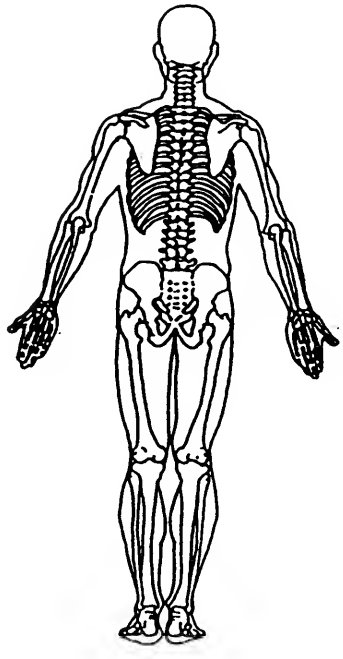
SOFT TISSUE/INTERNAL INJURIES





SKELETAL INJURIES





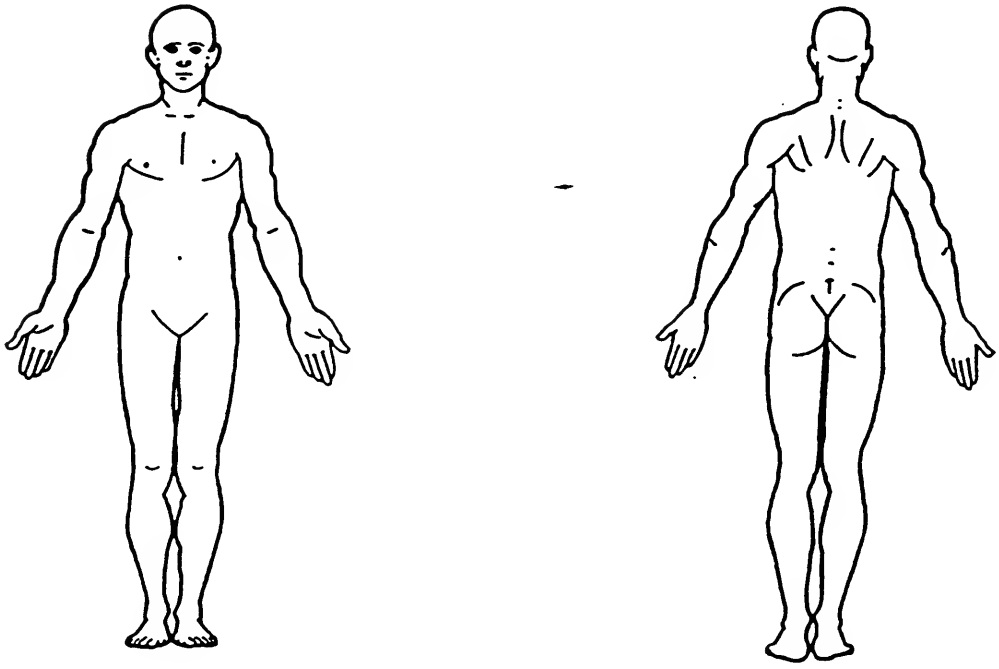
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 02 Occupant Number 02

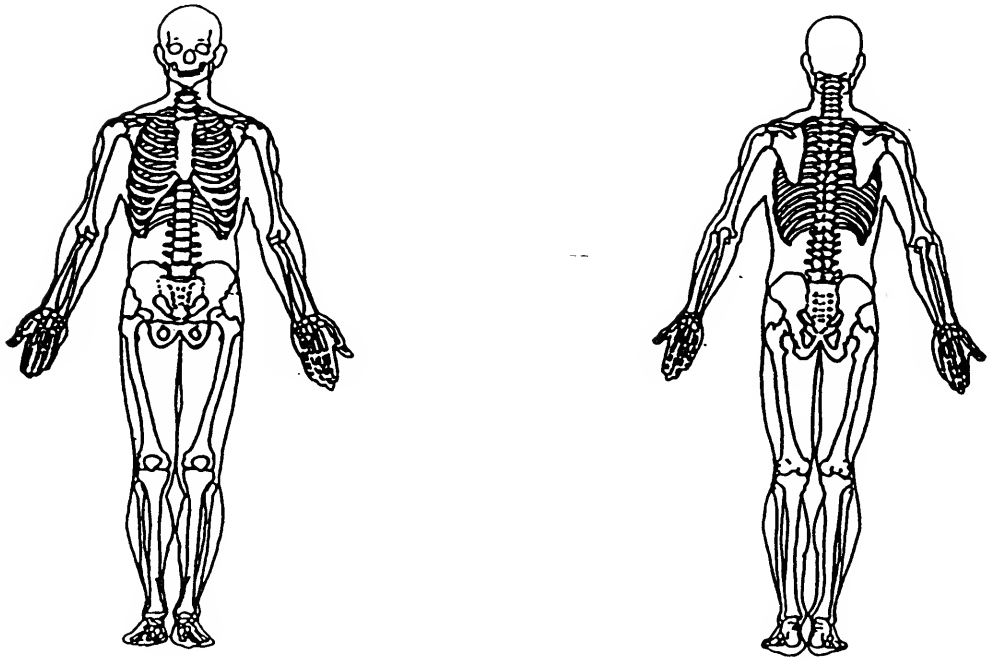
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



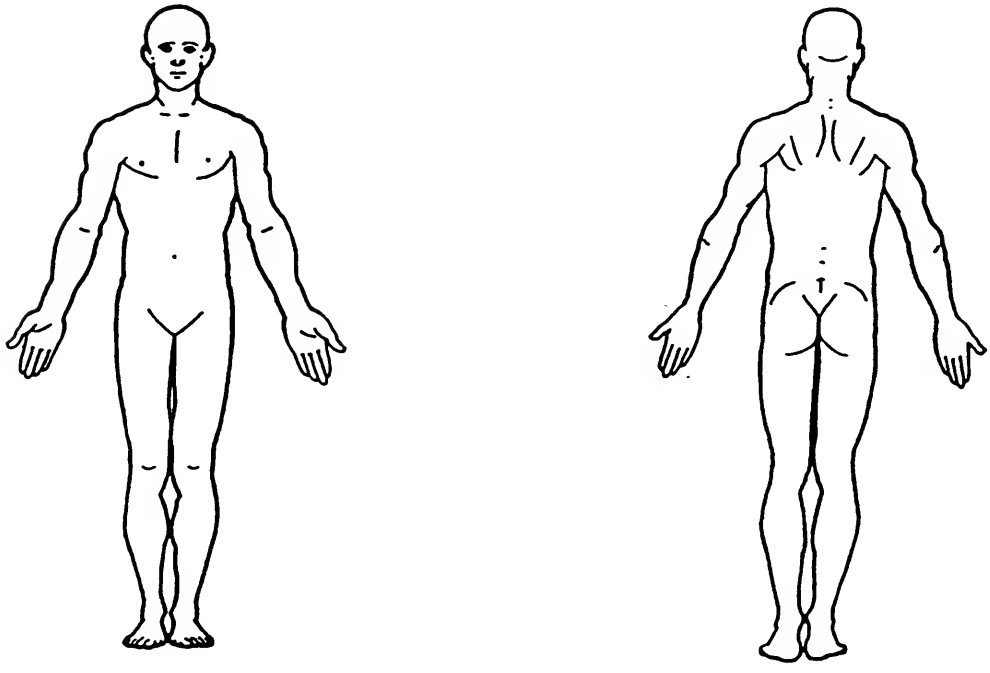
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 02 Occupant Number 03

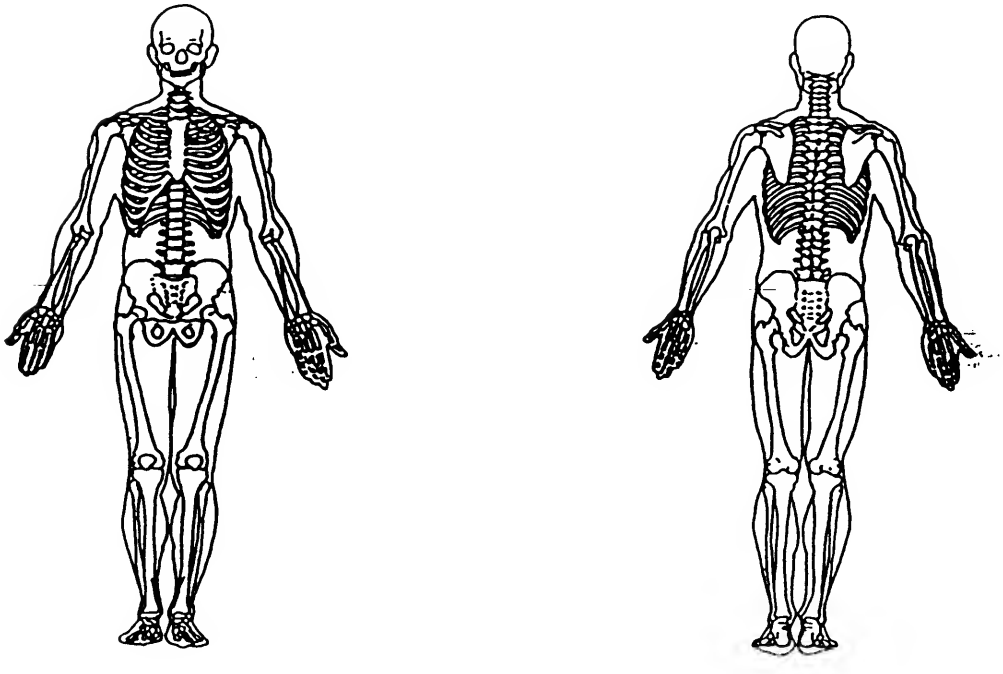
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT DATA QUESTIONS SUPPLEMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 02

Interviewee(s) Role or Name(s): DRIVER

Phone number: _____

OCCUPANT DATA QUESTIONS

	OCCUPANT # 4	OCCUPANT # 5	OCCUPANT # ___
SEATING POSITION? Front Left (FL) — Second Left (2L) Front Middle (FM) — Second Middle (2M) Front Right (FR) — Second Right (2R) Third Left (3L) — Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	2M	2R	
SEX, HEIGHT, WEIGHT, AND AGE?	[X] M [ ] F - Not pregnant [ ] F - Pregnant - # of months ___ [ ] F - Unk. if pregnant 53.5 HEIGHT: 25" 10.4 WEIGHT 23 AGE: 5 mos	[ ] M [X] F - Not pregnant [ ] F - Pregnant - # of months ___ [ ] F - Unk. if pregnant HEIGHT: 67" 170.2 WEIGHT 123 55.8 AGE 22	[ ] M [ ] F - Not pregnant [ ] F - Pregnant - # of months ___ [ ] F - nk. if pregnant HEIGHT: ___ WEIGHT: ___ AGE: ___
OCCUPANT POSTURE A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H Unknown	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above IN Child safety seat	[ ] Leaning to left [ ] Leaning to right [X] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above	[ ] Leaning to left [ ] Leaning to right [ ] Sitting upright [ ] Unknown Indicate all letters that apply and describe if other than above

Describe any additional information here:

HS Form 433G (1/96)

Information collected in this report is used to complete HS Forms 433A and 433B. These reports are authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

OCCUPANT DATA QUESTIONS (continued)

	OCCUPANT # 4	OCCUPANT # 5	OCCUPANT # ___
FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT **FEET** A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown **HANDS / ARMS** F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed Hanging down (K)	Indicate all letters that apply and further describe as needed (A) (K) UNK	Indicate all letters that apply and further describe as needed
BACK UP AGAINST THE SEAT BACK?	[ ] No (describe) [X] Yes [ ] Unknown	[ ] No (describe) [X] Yes [ ] Unknown	[ ] No (describe) [ ] Yes [ ] Unknown
ADJUSTABLE SEAT *TRACK*, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?	[X] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [ ] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown	[X] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [ ] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown	[ ] Not adjustable [ ] Seat all the way forward [ ] Between forward and middle [ ] At middle position [ ] Between middle and rear position [ ] Seat all the way rearward [ ] Unknown
ADJUSTABLE SEAT *BACK*, IF "YES" WHERE WAS THE *BACK* PRE AND POST IMPACT	PRE POST [X] [X] Not adjustable [ ] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown	PRE POST [X] [X] Not adjustable [ ] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown	PRE POST [ ] [ ] Not adjustable [ ] [ ] Completely upright [ ] [ ] Slightly reclined [ ] [ ] Completely reclined [ ] Slightly forward of upright [ ] Completely forward [ ] [ ] Unknown

RESTRAINT INFORMATION

	OCCUPANT # 4	OCCUPANT # 5	OCCUPANT # __
TYPE OF SEAT BELT AVAILABLE NOTE: If a belt is not available for a seat position -- describe reason	[ ] Unknown [X] Lap belt [ ] Shoulder belt [ ] Lap & Shoulder [ ] Not available * * Describe:	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Not available * * Describe:	[ ] Unknown [ ] Lap belt [ ] Shoulder belt [ ] Lap & Shoulder [ ] Not available * * Describe:
DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT? (i.e., 2 - point automatic belt)	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [ ] No [ ] Yes *
* **IF "YES", WERE THEY WORKING PROPERLY?**	[ ] Yes [ ] No (describe):	[ ] Yes [ ] No (describe):	[ ] Yes [ ] No (describe):
DO ANY OF THE BELTS ATTACH TO THE DOOR? (i.e., 3 - point automatic belt)	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [X] No [ ] Yes *	[ ] Unknown [ ] No [ ] Yes *
* **IF "YES", DOES IT CROSS:**	___ Chest ___ Lap ___ Both	___ Chest ___ Lap ___ Both	___ Chest ___ Lap ___ Both
OCCUPANT WEARING ANY SEATBELT?	[ ] No [X] Yes [ ] Unknown	[ ] No [X] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown

SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN

TYPE OF BELT WORN?	[X] Lap belt [ ] Shoulder belt [ ] Lap & Shoulder [ ] Unknown	[ ] Lap belt [ ] Shoulder belt [X] Lap & Shoulder [ ] Unknown	[ ] Lap belt [ ] Shoulder belt [ ] Lap & Shoulder [ ] Unknown
LAP BELT SITUATED?	[ ] Low on lap [ ] Across stomach [ ] Other (specify): Through CAR SEAT [ ] Unknown	[X] Low on lap [ ] Across stomach [ ] Other (specify): _____ [ ] Unknown	[ ] Low on lap [ ] Across stomach [ ] Other (specify): _____ [ ] Unknown
SHOULDER BELT SITUATED?	[ ] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____	[X] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____	[ ] Over shoulder [ ] Under the arm [ ] Behind back [ ] Behind seat [ ] Other (specify): _____

Describe any breaks, tears, or failures to any of the seat belts:

EJECTION, ENTRAPMENT, MOBILITY INFORMATION

	OCCUPANT # 4	OCCUPANT # 5	OCCUPANT # __
ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	[X] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	[ ] No [ ] Yes * [ ] Unknown * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
ANYONE PINNED IN THE VEHICLE?	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment	[X] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment	[ ] No [ ] Yes ___ physically pinned ___ jammed doors ___ fire, etc. [ ] Unknown Detail any entrapment
HOW DID OCCUPANT(S) EXIT THE VEHICLE?	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [X] Exited with some assistance [ ] Exited under own power [ ] Fully ejected [ ] Unknown	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [X] Exited under own power [ ] Fully ejected [ ] Unknown	[ ] Fatal before removed [ ] Removed while unconscious, or not oriented to time or place [ ] Removed due to perceived serious injuries [ ] Exited with some assistance [ ] Exited under own power [ ] Fully ejected [ ] Unknown

Further describe any ejection, entrapment, or mobility information here:

AIR BAG INFORMATION

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

[ ] YES (IF "YES" COMPLETE THIS SECTION)

[X] NO [ ] UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	OCCUPANT # ___ "OTHER" AIR BAG SPECIFY: _______	OCCUPANT # ___ "OTHER" AIR BAG SPECIFY: _______	OCCUPANT # ___ "OTHER" AIR BAG SPECIFY: _______
VEHICLE BEEN IN ANY PREVIOUS CRASHES? [ ] NO [ ] YES - continue to right [ ] UNKNOWN - go to box below	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] >1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] >1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED	[ ] Prior crash without deployment [ ] One prior crash with deployment [ ] >1, with at least one deployment [ ] Previous accident(s) unknown if deployed IF PRIOR DEPLOYMENT [ ] CHECK IF NOT REINSTALLED
TYPE OF AIR BAG?	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown	[ ] Original equipment [ ] Retrofitted [ ] Replacement [ ] Unknown
PRIOR SERVICE ON THE AIR BAG SYSTEM?	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ]Unknown [ ] Yes - Specify:
DID AIR BAG INFLATE DURING THIS CRASH?	[ ] Yes [ ]Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk	[ ] Yes [ ]Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk	[ ] Yes [ ]Unknown [ ] No If "NO" was the wiring disconnected prior to the crash? [ ] Yes [ ] No [ ] Unk
WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:
WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:	[ ] No [ ] Unknown [ ] Yes - Specify:

Describe any additional information here:

CHILD SAFETY SEAT INFORMATION

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

[X] YES (IF "YES" COMPLETE THIS SECTION)

[ ] NO [ ] UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	OCCUPANT # 4	OCCUPANT # __	OCCUPANT # __
MAKE AND MODEL OF THE SAFETY SEAT?	EVENFLO JOYRIDE W/ BASE		
TYPE OF SEAT?	[X] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown	[ ] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown	[ ] Infant [ ] Toddler [ ] Convertible [ ] Booster [ ] Integral [ ] Other Specify: _____ [ ] Unknown
DIRECTION FACING PRIOR TO THE CRASH?	[X] Front [ ] Rearward [ ] Unknown	[ ] Front [ ] Rearward [ ] Unknown	[ ] Front [ ] Rearward [ ] Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?	[ ] No [X] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?	[X] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown	[ ] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown	[ ] Looped through designated rear framing studs [ ] Looped through arm rest slots [ ] Belt across safety shield [ ] Looped through rear frame outside the designated framing struts [ ] Other (specify): _____ [ ] Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?	[X] Harness [ ] Shield [ ] Tether [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?	[ ] Harness [ ] Shield [ ] Tether [X] None [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] None [ ] Unknown	[ ] Harness [ ] Shield [ ] Tether [ ] None [ ] Unknown

Describe any additional information here:

INJURY INFORMATION

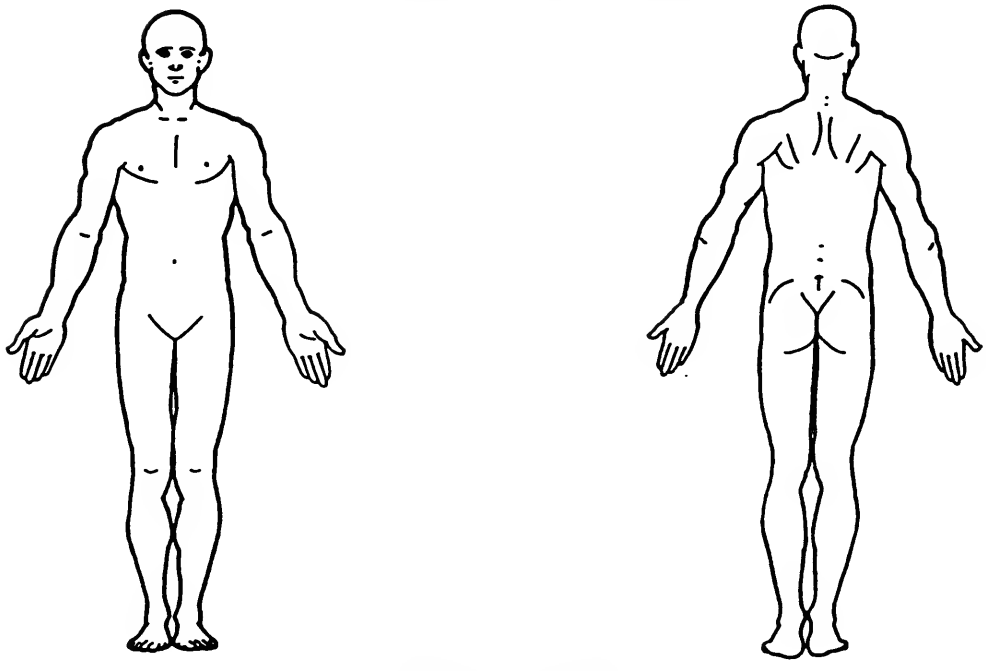
	OCCUPANT # 4	OCCUPANT # 5	OCCUPANT # ___
WERE YOU INJURED? • *If "YES" go to manikin page and record injuries in detail* • *If "NO" ask next questions*	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
DID YOU HAVE ANY OF THE FOLLOWING: *(If any injuries are checked, go to the manikin page and record location, lesion, and source)*	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other specify on manikin	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other specify on manikin	[ ] Cuts [ ] Abrasions [ ] Bruises [ ] Broken bones [ ] Head, skull, brain [ ] Internal injury [ ] Sprains, strains [ ] Other specify on manikin
TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
RECEIVE ANY MEDICAL TREATMENT? (check all that apply)	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown	[ ] Hospital [ ] Medical clinic [ ] Paramedics at scene [ ] Doctor's office [ ] Treated by self [ ] Unknown
HOSPITALIZED?	[X] No [ ] Yes - # of days ___ [ ] Unknown	[X] No [ ] Yes - # of days ___ [ ] Unknown	[ ] No [ ] Yes - # of days ___ [ ] Unknown
TREATED AND RELEASED FROM THE EMERGENCY ROOM?	[X] No [ ] Yes [ ] Unknown	[X] No [ ] Yes [ ] Unknown	[ ] No [ ] Yes [ ] Unknown
NAME OF MEDICAL TREATMENT FACILITY?			
RECEIVED ANY FOLLOW-UP TREATMENT?	[X] No [ ] Yes - describe any additional injuries diagnosed: ___ [ ] Unknown	[X] No [ ] Yes - describe any additional injuries diagnosed: ___ [ ] Unknown	[ ] No [ ] Yes - describe any additional injuries diagnosed: ___ [ ] Unknown
LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?	[ ] No [X] Not working prior to crash [ ] Yes - # of days ___ [ ] Unknown	[X] No [ ] Not working prior to crash [ ] Yes - # of days ___ [ ] Unknown	[ ] No [ ] Not working prior to crash [ ] Yes - # of days ___ [ ] Unknown
IF REQUIRED: **WILL YOU SIGN A MEDICAL RELEASE?** * *If not an in-person interview, make appointment to have release signed*	[ ] No [ ] Yes* [ ] Unknown DATE: ___ TIME: ___ PLACE: ___	[ ] No [ ] Yes* [ ] Unknown DATE: ___ TIME: ___ PLACE: ___	[ ] No [ ] Yes* [ ] Unknown DATE: ___ TIME: ___ PLACE: ___

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 02 Occupant Number 04

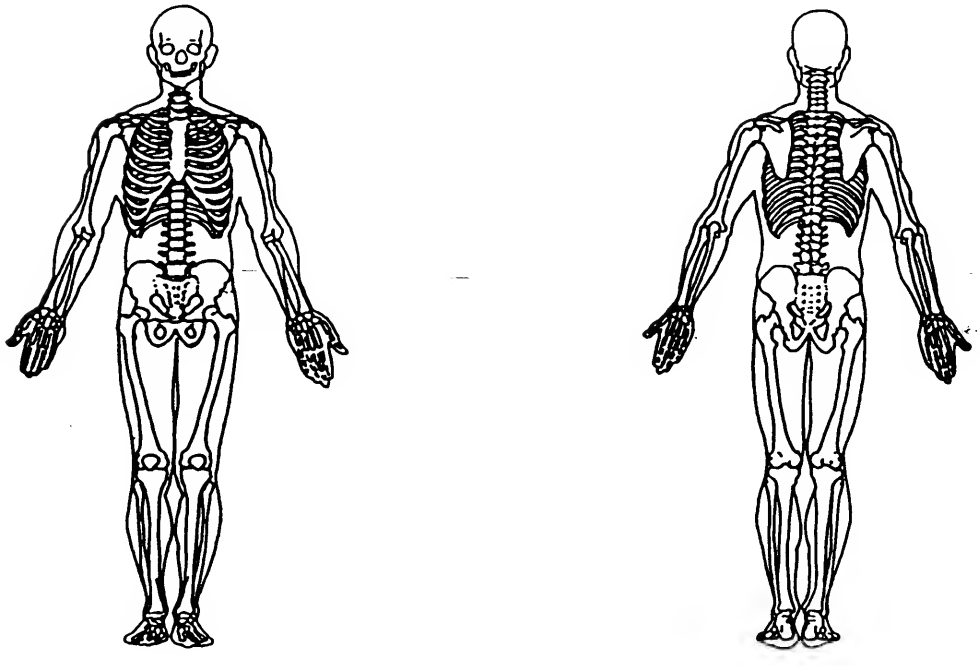
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



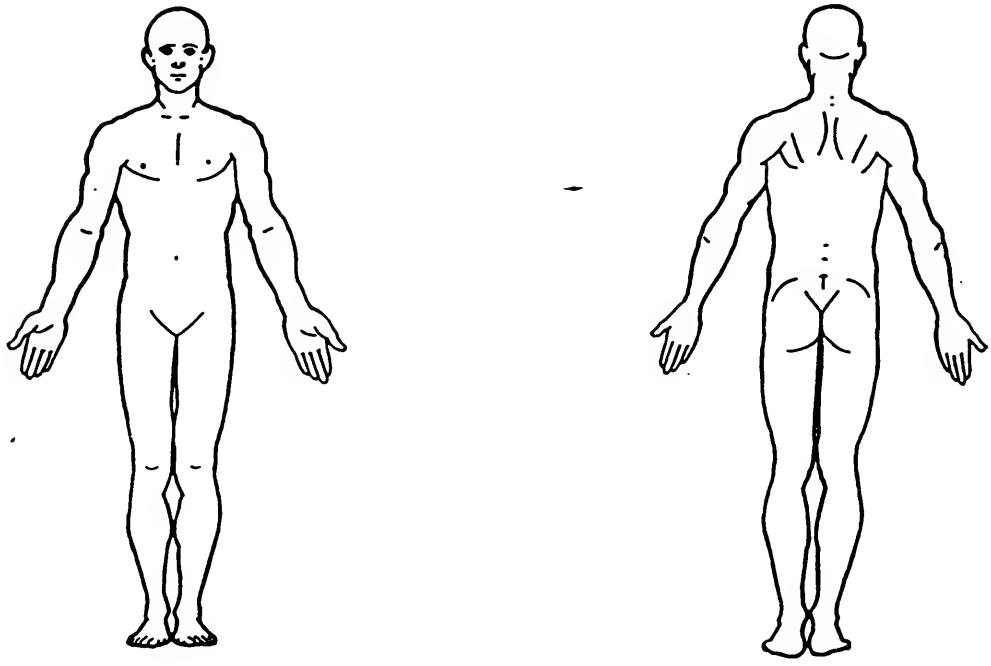
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 9625 Vehicle Number 02 Occupant Number 05

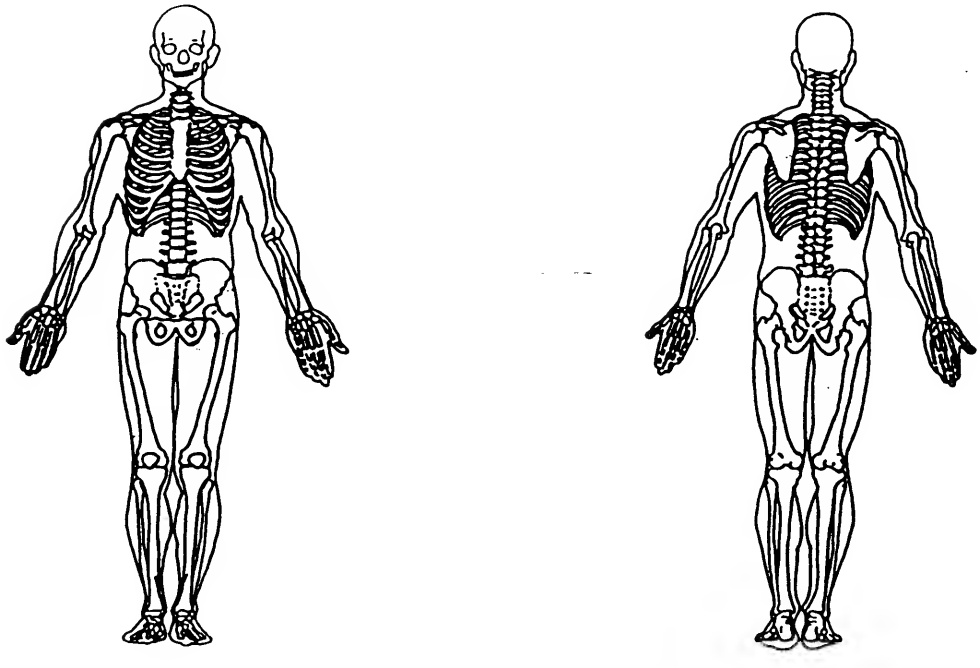
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

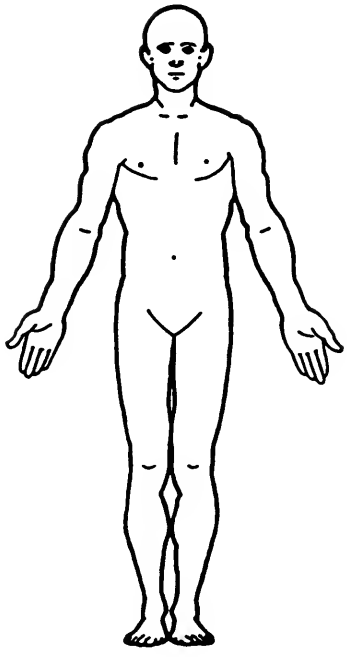
PSU Number 10 Case Number—Stratum 9625 Vehicle Number ___ Occupant Number ___

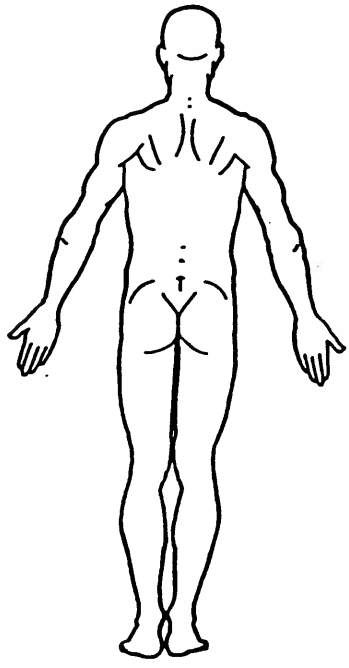
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s):_____

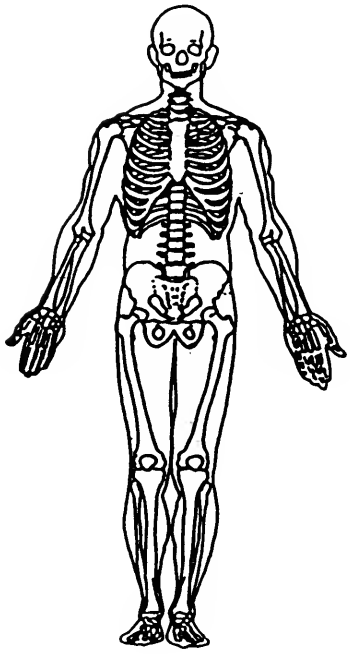
_____

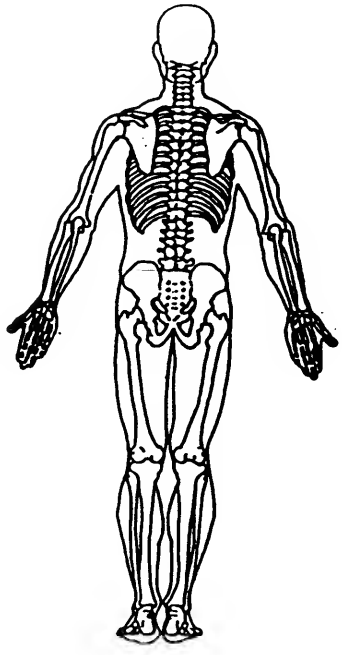
SOFT TISSUE/INTERNAL INJURIES





SKELETAL INJURIES





The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

NASS CDS Occupant Assessment Form: Case Vehicle Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT ASSESSMENT FORM

Form Approved
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 01
4. Occupant Number: 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 29
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older
(99) Unknown

6. Occupant's Sex: 2
(1) Male
(2) Female-not reported pregnant
(3) Female-pregnant-1st trimester(1st-3rd month)
(4) Female-pregnant-2nd trimester(4th-6th month)
(5) Female-pregnant-3rd trimester(7th-9th month)
(6) Female-pregnant-term unknown
(9) Unknown

7. Occupant's Height: 152
Code actual height to the nearest centimeter.
(999) Unknown

60 inches X 2.54 = 152 centimeters

8. Occupant's Weight: 059
Code actual weight to the nearest kilogram.
(999) Unknown

130 pounds X .4536 = 58.97 kilograms

9. Occupant's Role: 1
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position: 11

Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown

11. Occupant's Posture: 0
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in front of seat
(8) Other abnormal posture (specify): _____
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0
    (0) No ejection
    (1) Complete ejection
    (2) Partial ejection
    (3) Ejection, unknown degree
    (9) Unknown

13. Ejection Area 0
    (0) No ejection
    (1) Windshield
    (2) Left front
    (3) Right front
    (4) Left rear
    (5) Right rear
    (6) Rear
    (7) Roof
    (8) Other area (e.g., back of pickup, etc.) (specify):_____
    (9) Unknown

14. Ejection Medium 0
    (0) No ejection
    (1) Door/hatch/tailgate
    (2) Nonfixed roof structure
    (3) Fixed glazing
    (4) Nonfixed glazing (specify):
    _____
    (5) Integral structure
    (8) Other medium (specify):
    _____
    (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment 0
    (0) Not entrapped/exit not inhibited
    (1) Entrapped/pinned - mechanically restrained
    (2) Could not exit vehicle due to jammed doors, fire, etc.
    (specify):_____
    _____
    (9) Unknown

17. Occupant Mobility 4
    (0) Occupant fatal before removed from vehicle
    (1) Removed from vehicle while unconscious or not oriented to time or place
    (2) Removed from vehicle due to perceived serious injuries
    (3) Exited vehicle with some assistance
    (4) Exited vehicle under own power
    (5) Occupant fully ejected
    (8) Removed from vehicle for other reasons (specify): _____
    (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4
(0) None available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available—type unknown

Integral Belt Partially Destroyed
(6) Shoulder belt (lap belt destroyed/removed)
(7) Lap belt (shoulder belt destroyed/removed)
(8) Other belt (specify): _____
(9) Unknown

19. Manual (Active) Belt System Use 04
(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify): _____
(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used—type unknown
(08) Other belt used (specify): _____
(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat—type unknown
(18) Other belt used with child safety seat (specify): _____
(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1
(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

Belt Used Improperly
(3) Shoulder belt worn under arm
(4) Shoulder belt worn behind back or seat
(5) Belt worn around more than one person
(6) Lap belt worn on abdomen
(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of manual belt system (specify): _____
(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1
(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other manual belt failure (specify): _____
(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1
(0) No manual shoulder belt
(1) No upper anchorage adjustment for manual shoulder belt

Adjustable shoulder Belt Upper Anchorage
(2) In full up position
(3) In mid position
(4) In full down position
(5) Position unknown
(9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/ Function 0
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

24. Automatic (Passive) Belt System Use 0
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
(3) Automatic belt use unknown
(9) Unknown

25. Automatic (Passive) Belt System Type 0
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify): _____
(9) Unknown

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 4
    (0) None used
    (1) Police did not indicate belt use
    (2) Shoulder belt
    (3) Lap belt
    (4) Lap and shoulder belt
    (5) Belt used, type not specified
    (6) Child safety seat
    (7) Automatic belt
    (8) Other type belt, (specify):

    _____

    (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1
    (0) No air bag available
    (1) Police did not indicate air bag availability/function
    (2) Deployed
    (3) Not deployed
    (4) Unknown if deployed
    (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

[X] Vehicle inspection
[ ] Official injury data
[ ] Driver/occupant interview
[ ] Other (specify):

_____

[ ] Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position) 1
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify):

    _____

    (3) Air bag not reinstalled
    (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1
    (0) Not equipped/not available
    (1) Deployed during accident (as a result of impact)
    (2) Deployed inadvertently just prior to accident
    (3) Deployed, details unknown
    (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
    (5) Unknown if deployed
    (7) Nondeployed
    (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify):

    _____

    (3) Air bag not reinstalled
    (9) Unknown

    Specify type of "other" air bag present:

    _____

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0
    (0) Not equipped with an "other" air bag
    (1) Deployed during accident (as a result of impact)
    (2) Deployed inadvertently just prior to accident
    (3) Deployed, details unknown
    (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
    (5) Unknown if deployed
    (7) Nondeployed
    (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1
    (0) Not equipped/not available
    (1) No
    (2) Yes (specify):

    _____

    (9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1
(0) Not equipped/not available
(1) No previous accidents AS FAR AS they Know

Yes
(2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 1
(0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag AS FAR AS they Know
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1
(0) Not equipped/not available
(1) No prior maintenance not since they have owned it
(2) Yes, prior maintenance (specify): _____
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01
(00) Not equipped/not available
_____ Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 1
(0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____
(6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact +0006
(_000) Not equipped/not available
Code the value of the delta V for the impact that initiated the air bag deployment
(_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2
(0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 01
(00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage
(02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify): _____
(95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION *continued*

44. Source of Air Bag Damage **01**
(00) Not equipped/not available
(01) Not damaged
(02) Object worn by occupant, (specify):
(03) Object carried by occupant, (specify):
(04) Adaptive/assistive controls, (specify):
(05) Fire in vehicle
(06) Thermal burns
(07) Rescue or emergency efforts
(88) Other damage source (specify):
(95) Damaged, unknown source
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

45. Was The Air Bag Tethered? **2**
(0) Not equipped/not available
(1) No
(2) Yes (specify number of tether straps): 2, 3 tethers
(3) Deployed, unknown if tethered
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

46. Did The Air Bag Have Vent Ports? **2**
(0) Not equipped/not available
(1) No
(2) Yes (specify number of vent ports): 2
(3) Deployed, unknown if vent ports present
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? **1**
(0) Not equipped/not available
(1) No
(2) Yes (specify):
(3) Deployed, unknown if other occupant contact to air bag
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

48. Was This Occupant Wearing Eye-wear? **1**
(0) Not air bag equipped/air bag not available
(1) No
(2) Eyeglasses/sunglasses
(3) Contact lenses
(4) Deployed, unknown if eyewear worn
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position **3**
(0) No head restraints
(1) Integral—no damage
(2) Integral—damaged during accident
(3) Adjustable—no damage
(4) Adjustable—damaged during accident
(5) Add-on—no damage
(6) Add-on—damaged during accident
(8) Other (specify):
(9) Unknown

50. Seat Type (this Occupant Position) **02**
(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Box mounted seat (i.e., van type)
(10) Other seat type (specify):
(99) Unknown

51. Seat Orientation (this Occupant Position) **1**
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):
(9) Unknown

52. Seat Track Adjusted Position Prior To Impact **3**
(0) Occupant not seated or no seat
(1) Non-adjustable seat track

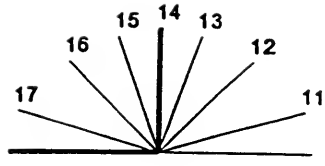
Adjustable Seat Track
(2) Seat at forward most track position
(3) Seat between forward most and middle track positions
(4) Seat at middle track position
(5) Seat between middle and rear most track positions
(6) Seat at rear most track position
(9) Unknown

per driver

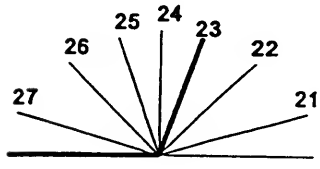
HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 2 3
    (00) Occupant not seated or no seat
    (01) Not adjustable

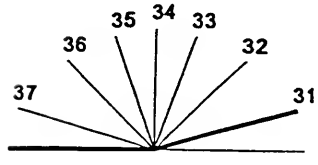
Upright prior to impact
(11) Moved to completely rearward position
(12) Moved to rearward midrange position
(13) Moved to slightly rearward position
(14) Retained pre-impact position
(15) Moved to slightly forward position
(16) Moved to forward midrange position
(17) Moved to completely forward position



Slightly reclined prior to impact
(21) Moved to completely rearward position
(22) Moved to rearward midrange position
(23) Retained pre-impact position
(24) Moved to upright position
(25) Moved to slightly forward position
(26) Moved to forward midrange position
(27) Moved to completely forward position



Completely reclined prior to impact
(31) Retained pre-impact position
(32) Moved to rearward midrange position
(33) Moved to slightly rearward position
(34) Moved to upright position
(35) Moved to slightly forward position
(36) Moved to forward midrange position
(37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1
    (0) Occupant not seated or no seat
    (1) No seat performance failure(s)
    (2) Seat adjusters failed
    (3) Seat back folding locks or "seat back" failed (specify):_____
    (4) Seat track/anchors failed
    (5) Deformed by impact of occupant
    (6) Deformed by passenger compartment intrusion, (specify):_____
    (7) Combination of above (specify):_____
    (8) Other (specify): _____
    (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 0
(000) No child safety seat
Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):
_____
(998) Unknown make/model
(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat - with shield
(5) Booster seat - without shield
(7) Other type child safety seat (specify):
_____
(8) Unknown child safety seat type
(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0
(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):
_____
(09) Unknown orientation

Designed For Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):
_____
(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):
_____
(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 0

59. Child Safety Seat Shield Usage 0 0

60. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.
(00) No child safety seat

Not Designed With Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 0

(0) O - No injury
(1) C - Possible injury
(2) B - Nonincapacitating injury
(3) A - Incapacitating injury
(4) K - Killed
(5) U - Injury, severity unknown
(6) Died prior to accident
(9) Unknown

62. Treatment - Mortality 0

(0) No treatment
(1) Fatal
(2) Fatal - ruled disease (specify):

_____

Nonfatal
(3) Hospitalization
(4) Transported and released
(5) Treatment at scene - nontransported
(6) Treatment later
(7) Treatment - other (specify):

_____

(8) Transported to a medical facility-unknown if treated
(9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 0

(0) Not treated at a medical facility
(1) Trauma center
(2) Hospital
(3) Medical clinic
(4) Physician's office
(5) Treatment later at medical facility
(8) Other (specify):

_____

(9) Unknown

64. Hospital Stay 00

(00) Not Hospitalized
_____Code the number of days (up through 60) that the occupant stayed in hospital.
(61) 61 days or more
(99) Unknown

65. Working Days Lost 99

_____Code the number of days (up through 60) that the occupant lost from work due to the accident
(00) No working days lost
(61) 61 days or more
(62) Fatally injured
(97) Not working prior to accident
(99) Unknown

STOP WORK HERE

VARIABLES 66-74

TO BE CODED BY THE ZONE CENTER

TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES

66. Time to Death 0 0
____Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 +n up through 30 days = 60)
(00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death 0 0

68. 2nd Medically Reported Cause of Death 0 0

69. 3rd Medically Reported Cause of Death 0 0
____Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
(00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):
_____
(97) Other result (includes fatal ruled disease) (specify):
_____
(99) Unknown

70. Number of Recorded Injuries for This Occupant 0 3
____Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 0 1
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood? 1
(1) No - blood not given
(2) Yes - blood given
(specify units):_____
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO_3 0 1
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported , HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):_____
(9) Unknown if belt used

NASS CDS Occupant Injury Form:
Case Vehicle Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	10	3. Vehicle Number	01
2. Case Number - Stratum	9625	4. Occupant Number	01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
Abrasion (R) forearm	1st 5. 7	6. 7	7. 9	8. 02	9. 02	10. 1	11. 1	12. 170	13. 2	14. 1	15. 00
Contusion (R) forearm	2nd 16 8	17. 7	18. 9	19. 04	20. 02	21. 1	22. 1	23. 252	24. 1	25. 1	26. 00
laceration (R) forearm	3rd 27. 7	28. 7	29. 9	30. 06	31. 00	32. 1	33. 1	34. 252	35. 1	36. 1	37. 00
	4th 38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.
	5th 49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.
	6th 60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.
	7th 71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.
	8th 82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.
	9th 93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.
	10th 104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.

HS Form 433B (1/96)

This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
11th	—	—	—	— —	— —	—	—	— — —	—	—	— —
12th	—	—	—	— —	— —	—	—	— — —	—	—	— —
13th	—	—	—	— —	— —	—	—	— — —	—	—	— —
14th	—	—	—	— —	— —	—	—	— — —	—	—	— —
15th	—	—	—	— —	— —	—	—	— — —	—	—	— —
16th	—	—	—	— —	— —	—	—	— — —	—	—	— —
17th	—	—	—	— —	— —	—	—	— — —	—	—	— —
18th	—	—	—	— —	— —	—	—	— — —	—	—	— —
19th	—	—	—	— —	— —	—	—	— — —	—	—	— —
20th	—	—	—	— —	— —	—	—	— — —	—	—	— —
21st	—	—	—	— —	— —	—	—	— — —	—	—	— —
22nd	—	—	—	— —	— —	—	—	— — —	—	—	— —
23rd	—	—	—	— —	— —	—	—	— — —	—	—	— —
24th	—	—	—	— —	— —	—	—	— — —	—	—	— —
25th	—	—	—	— —	— —	—	—	— — —	—	—	— —

OCCUPANT INJURY CLASSIFICATION

Body Region

(1) Head
(2) Face
(3) Neck
(4) Thorax
(5) Abdomen
(6) Spine
(7) Upper Extremity
(8) Lower Extremity
(9) Unspecified

Type of Anatomic Structure

(1) Whole Area
(2) Vessels
(3) Nerves
(4) Organs (includes Muscles/ligaments)
(5) Skeletal (includes joints)
(6) Head - LOC
(9) Skin

Specific Anatomic Structure

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02.

The exceptions to this rule apply to:

Whole Area
(02) Skin - Abrasion
(04) Skin - Contusion
(06) Skin - Laceration
(08) Skin - Avulsion
(10) Amputation
(20) Burn
(30) Crush
(40) Degloving
(50) Injury - NFS
(90) Trauma, other than mechanical

Head - LOC
(02) Length of LOC

(04) Level
(06) of
(08) Consciousness

(10) Concussion

Spine
(02) Cervical
(04) Thoracic
(06) Lumbar

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

(1) Minor Injury
(2) Moderate Injury
(3) Serious Injury
(4) Severe Injury
(5) Critical Injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

Aspect

(1) Right
(2) Left
(3) Bilateral
(4) Central
(5) Anterior
(6) Posterior
(7) Superior
(8) Inferior
(9) Unknown
(0) Whole region

SOURCE OF INJURY DATA

OFFICIAL RECORDS
(1) Autopsy records with or without hospital/medical records
(2) Hospital/medical records other than emergency room (e.g., discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS
(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify): _____
(9) Police

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Restrained?

___ No

___ Yes

Blood Alcohol Level (mg/dl)

BAL = ____

Glasgow Coma Scale Score

GCSS = ____

Units of Blood Given

Units = ____

Arterial Blood Gases

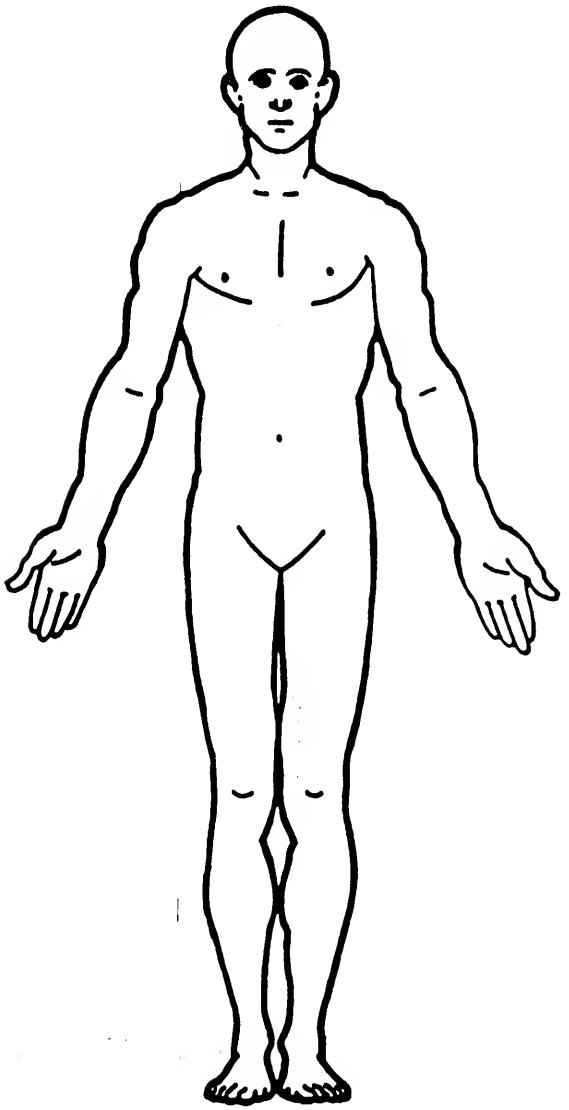
pH = __.__

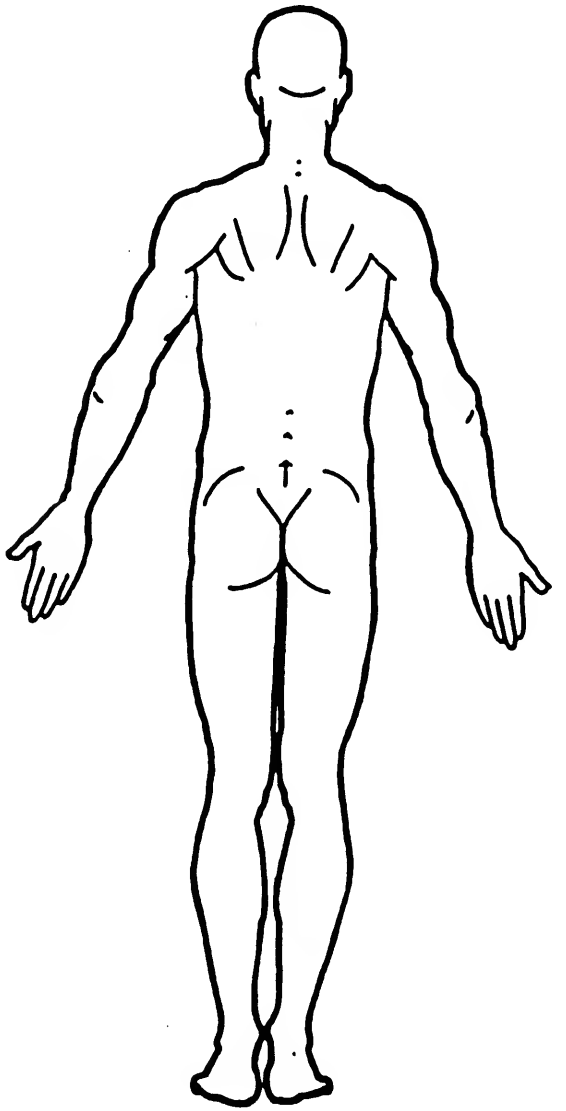
PO_2 = ____

PCO_2 ____

HCO_3 ____

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

INJURY SOURCES

FRONT
(001) Windshield
(002) Mirror
(003) Sunvisor
(004) Steering wheel rim
(005) Steering wheel hub/spoke
(006) Steering wheel (combination of codes 004 and 005)
(007) Steering column, transmission selector lever, other attachment
(008) Cellular telephone or CB radio
(009) Add on equipment (e.g., tape deck, air conditioner)
(010) Left instrument panel and below
(011) Center instrument panel and below
(012) Right instrument panel and below
(013) Glove compartment door
(014) Knee bolster
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
(017) Windshield reinforced by exterior object (specify)
_____
(019) Other front object (specify):
_____

LEFT SIDE
(051) Left side interior surface, excluding hardware or armrests
(052) Left side hardware or armrest
(053) Left A (A1/A2)-pillar
(054) Left B-pillar
(055) Other left pillar (specify):
_____
(056) Left side window glass
(057) Left side window frame
(058) Left side window sill
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(060) Other left side object (specify):
_____

RIGHT SIDE
(101) Right side interior surface, excluding hardware or armrests
(102) Right side hardware or armrest
(103) Right A (A1/A2)-pillar
(104) Right B-pillar
(105) Other right pillar (specify):
_____
(106) Right side window glass
(107) Right side window frame
(108) Right side window sill
(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(110) Other right side object (specify):
_____

INTERIOR
(151) Seat, back support
(152) Belt restraint webbing/buckle
(153) Belt restraint B-pillar or door frame attachment point
(154) Other restraint system component (specify):
_____
(155) Head restraint system
(160) Other occupants (specify):
_____
(161) Interior loose objects
(162) Child safety seat (specify):
_____
(163) Other interior object (specify):
_____

AIR BAG
(170) Air bag-driver side
(171) Air bag-driver side and eyewear
(172) Air bag-driver side and jewelry
(173) Air bag-driver side and object held
(174) Air bag-driver side and object in mouth
(175) Air bag compartment cover-driver side
(176) Air bag compartment cover-driver side and eyewear
(177) Air bag compartment cover-driver side and jewelry
(178) Air bag compartment cover-driver side and object hald
(179) Air bag compartment cover-driver side and object in mouth
(180) Air bag-passenger side
(181) Air bag-passenger side and eyewear
(182) Air bag-passenger side and jewelry
(183) Air bag-passenger side and object held
(184) Air bag-passenger side and object in mouth
(185) Air bag compartment cover-passenger side
(186) Air bag compartment cover-passenger side and eyewear
(187) Air bag compartment cover-passenger side and jewelry
(188) Air bag compartment cover-passenger side and object held
(189) Air bag compartment cover-passenger side and object in mouth
(190) Other air bag (specify)
_____
(195) Other air bag compartment cover (specify)
_____

ROOF
(201) Front header
(202) Rear header
(203) Roof left side rail
(204) Roof right side rail
(205) Roof or convertible top

FLOOR
(251) Floor (including toe pan)
(252) Floor or console mounted transmission lever, including console
(253) Parking brake handle
(254) Foot controls including parking brake

REAR
(301) Backlight (rear window)
(302) Backlight storage rack, door, etc.
(303) Other rear object (specify):
_____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT
(401) Hand controls for braking/acceleration
(402) Steering control devices (attached to OEM steering wheel)
(403) Steering knob attached to steering wheel
(405) Replacement steering wheel (i.e., reduced diameter)
(406) Joy stick steering controls
(407) Wheelchair tie-downs
(408) Modification to seat belts, (specify): _____
(409) Additional or relocated switches, (specify):
_____
(410) Raised roof
(411) Wall mounted head rest (used behind wheel chair)
(412) Other adaptive device (specify):_____
_____

EXTERIOR of OCCUPANT'S VEHICLE
(451) Hood
(452) Outside hardware (e.g., outside mirror, antenna)
(453) Other exterior surface or tires (specify):
_____
_____
(454) Unknown exterior objects

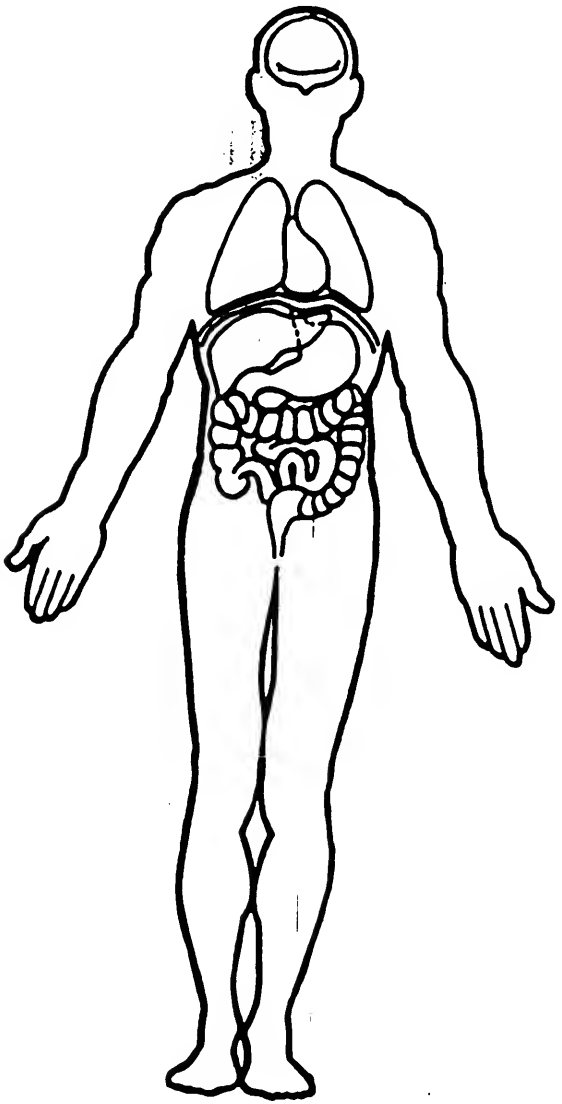
EXTERIOR OF OTHER MOTOR VEHICLE
(501) Front bumper
(502) Hood edge
(503) Other front of vehicle (specify):
_____
(504) Hood
(505) Hood ornament
(506) Windshield, roof rail, A-pillar
(507) Side surface
(508) Side mirrors
(509) Other side protrusions (specify):
_____
(510) Rear surface
(511) Undercarriage
(512) Tires and wheels
(513) Other exterior of other motor vehicle (specify): _____
_____
(514) Unknown exterior of other motor vehicle

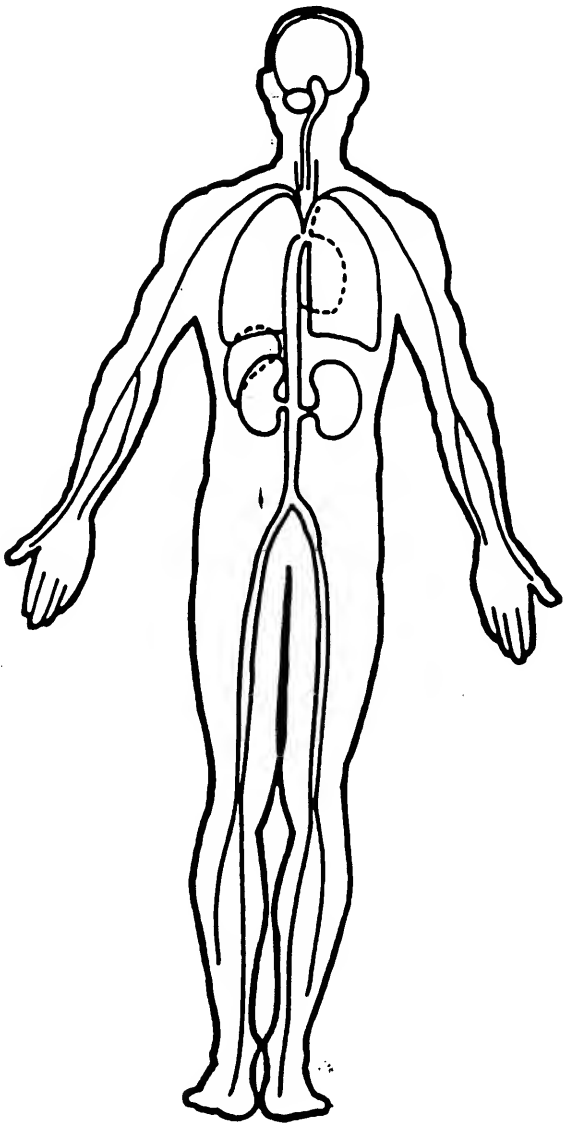
OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT
(551) Ground
(598) Other vehicle or object (specify):
_____
(599) Unknown vehicle or object

NONCONTACT INJURY
(601) Fire in vehicle
(602) Flying glass
(603) Other noncontact injury source (specify): _____
(604) Air bag exhaust gases
(697) Injured, unknown source

OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





LHI

CAUSE OF DEATH

ICD-9-CM

OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
___ Blood and urine tests ___ Blood test only ___ Urine test only ___ Other test ___ Unspecified		

MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy–medical information based upon an invasive examination of a body
ME	Medical examiner's record–where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary–any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet–face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary–shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record–summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
PX	Radiographic records–taken after the patient has been admitted, or while in surgery or intensive care
PN	Patient progress notes–supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam–medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record–consultations are in essence additional history and physicial exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report–where the author of this information is undefined
EN	Emergency room nurse–"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor–"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes–supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records–taken during the patients stay in the emergency room
CV	Coroner's verdict–statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report–medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician–report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source–medical information based on an other source (e.g., newspaper, DVM–Doctor of Veterinary Medicine)

NASS CDS Occupant Assessment Form: Case Vehicle Right Front Passenger

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT ASSESSMENT FORM

Form Approved
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 01
4. Occupant Number: 02

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 06
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older
(99) Unknown

6. Occupant's Sex: 1
(1) Male
(2) Female-not reported pregnant
(3) Female-pregnant-1st trimester(1st-3rd month)
(4) Female-pregnant-2nd trimester(4th-6th month)
(5) Female-pregnant-3rd trimester(7th-9th month)
(6) Female-pregnant-term unknown
(9) Unknown

7. Occupant's Height: 117
Code actual height to the nearest centimeter.
(999) Unknown
46 inches X 2.54 = 116.84 centimeters

8. Occupant's Weight: 023
Code actual weight to the nearest kilogram.
(999) Unknown
50 pounds X .4536 = 22.68 kilograms

9. Occupant's Role: 2
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position: 13
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown

11. Occupant's Posture: 0
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in front of seat
(8) Other abnormal posture (specify): _____
(9) Unknown

HS Form 433A (1/96)

EJECTION/ENTRAPMENT

12. Ejection 0
    (0) No ejection
    (1) Complete ejection
    (2) Partial ejection
    (3) Ejection, unknown degree
    (9) Unknown

13. Ejection Area 0
    (0) No ejection
    (1) Windshield
    (2) Left front
    (3) Right front
    (4) Left rear
    (5) Right rear
    (6) Rear
    (7) Roof
    (8) Other area (e.g., back of pickup, etc.)
    (specify):_____
    (9) Unknown

14. Ejection Medium 0
    (0) No ejection
    (1) Door/hatch/tailgate
    (2) Nonfixed roof structure
    (3) Fixed glazing
    (4) Nonfixed glazing (specify):
    _____
    (5) Integral structure
    (8) Other medium (specify):
    _____
    (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment 0
    (0) Not entrapped/exit not inhibited
    (1) Entrapped/pinned - mechanically restrained
    (2) Could not exit vehicle due to jammed doors, fire, etc.
    (specify):_____
    _____
    (9) Unknown

17. Occupant Mobility 1
    (0) Occupant fatal before removed from vehicle
    (1) Removed from vehicle while unconscious or not oriented to time or place
    (2) Removed from vehicle due to perceived serious injuries
    (3) Exited vehicle with some assistance
    (4) Exited vehicle under own power
    (5) Occupant fully ejected
    (8) Removed from vehicle for other reasons
    (specify): _____
    (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4
(0) None available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available—type unknown

Integral Belt Partially Destroyed
(6) Shoulder belt (lap belt destroyed/removed)
(7) Lap belt (shoulder belt destroyed/removed)
(8) Other belt (specify): _____
(9) Unknown

19. Manual (Active) Belt System Use 00
(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify): _____
(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used—type unknown
(08) Other belt used (specify): _____
(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat—type unknown
(18) Other belt used with child safety seat (specify): _____
(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 0
(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

Belt Used Improperly
(3) Shoulder belt worn under arm
(4) Shoulder belt worn behind back or seat
(5) Belt worn around more than one person
(6) Lap belt worn on abdomen
(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of manual belt system (specify): _____
(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 0
(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other manual belt failure (specify): _____
(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1
(0) No manual shoulder belt
(1) No upper anchorage adjustment for manual shoulder belt

Adjustable shoulder Belt Upper Anchorage
(2) In full up position
(3) In mid position
(4) In full down position
(5) Position unknown
(9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/ Function 0
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

24. Automatic (Passive) Belt System Use 0
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
(3) Automatic belt use unknown
(9) Unknown

25. Automatic (Passive) Belt System Type 0
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify): _____
(9) Unknown

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 4
    (0) None used
    (1) Police did not indicate belt use
    (2) Shoulder belt
    (3) Lap belt
    (4) Lap and shoulder belt
    (5) Belt used, type not specified
    (6) Child safety seat
    (7) Automatic belt
    (8) Other type belt, (specify):

    _____
    (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1
    (0) No air bag available
    (1) Police did not indicate air bag availability/function
    (2) Deployed
    (3) Not deployed
    (4) Unknown if deployed
    (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

[X] Vehicle inspection
[ ] Official injury data
[ ] Driver/occupant interview
[ ] Other (specify):

    _____
[ ] Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position) 1
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify):

    _____
    (3) Air bag not reinstalled
    (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1
    (0) Not equipped/not available
    (1) Deployed during accident (as a result of impact)
    (2) Deployed inadvertently just prior to accident
    (3) Deployed, details unknown
    (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
    (5) Unknown if deployed
    (7) Nondeployed
    (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify):

    _____
    (3) Air bag not reinstalled
    (9) Unknown

    Specify type of "other" air bag present:

    _____

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0
    (0) Not equipped with an "other" air bag
    (1) Deployed during accident (as a result of impact)
    (2) Deployed inadvertently just prior to accident
    (3) Deployed, details unknown
    (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
    (5) Unknown if deployed
    (7) Nondeployed
    (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1
    (0) Not equipped/not available
    (1) No
    (2) Yes (specify):

    _____
    (9) Unknown

150A

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1
(0) Not equipped/not available
(1) No previous accidents

Yes
(2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 1
(0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1
(0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify): _____
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01
(00) Not equipped/not available
_____ Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 1
(0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____
(6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact -006
(_000) Not equipped/not available
Code the value of the delta V for the impact that initiated the air bag deployment
(_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2
(0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 01
(00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage
(02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify): _____
(95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION *continued*

44. Source of Air Bag Damage 01
(00) Not equipped/not available
(01) Not damaged
(02) Object worn by occupant, (specify):
(03) Object carried by occupant, (specify):
(04) Adaptive/assistive controls, (specify):
(05) Fire in vehicle
(06) Thermal burns
(07) Rescue or emergency efforts
(88) Other damage source (specify):
(95) Damaged, unknown source
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

45. Was The Air Bag Tethered? 1
(0) Not equipped/not available
(1) No
(2) Yes (specify number of tether straps):
(3) Deployed, unknown if tethered
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

46. Did The Air Bag Have Vent Ports? 2
(0) Not equipped/not available
(1) No
(2) Yes (specify number of vent ports):
(3) Deployed, unknown if vent ports present
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
(0) Not equipped/not available
(1) No
(2) Yes (specify):
(3) Deployed, unknown if other occupant contact to air bag
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

48. Was This Occupant Wearing Eye-wear? 1
(0) Not air bag equipped/air bag not available
(1) No
(2) Eyeglasses/sunglasses
(3) Contact lenses
(4) Deployed, unknown if eyewear worn
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
(0) No head restraints
(1) Integral—no damage
(2) Integral—damaged during accident
(3) Adjustable—no damage
(4) Adjustable—damaged during accident
(5) Add-on—no damage
(6) Add-on—damaged during accident
(8) Other (specify):
(9) Unknown

50. Seat Type (this Occupant Position) 02
(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Box mounted seat (i.e., van type)
(10) Other seat type (specify):
(99) Unknown

51. Seat Orientation (this Occupant Position) 1
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):
(9) Unknown

52. Seat Track Adjusted Position Prior To Impact 5
(0) Occupant not seated or no seat
(1) Non-adjustable seat track

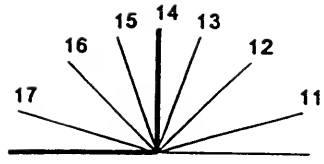
Adjustable Seat Track
(2) Seat at forward most track position
(3) Seat between forward most and middle track positions
(4) Seat at middle track position
(5) Seat between middle and rear most track positions
(6) Seat at rear most track position
(9) Unknown

Per Driver

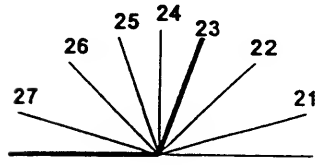
HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 23
(00) Occupant not seated or no seat
(01) Not adjustable

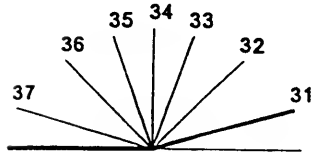
Upright prior to impact
(11) Moved to completely rearward position
(12) Moved to rearward midrange position
(13) Moved to slightly rearward position
(14) Retained pre-impact position
(15) Moved to slightly forward position
(16) Moved to forward midrange position
(17) Moved to completely forward position



Slightly reclined prior to impact
(21) Moved to completely rearward position
(22) Moved to rearward midrange position
(23) Retained pre-impact position
(24) Moved to upright position
(25) Moved to slightly forward position
(26) Moved to forward midrange position
(27) Moved to completely forward position



Completely reclined prior to impact
(31) Retained pre-impact position
(32) Moved to rearward midrange position
(33) Moved to slightly rearward position
(34) Moved to upright position
(35) Moved to slightly forward position
(36) Moved to forward midrange position
(37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1
(0) Occupant not seated or no seat
(1) No seat performance failure(s)
(2) Seat adjusters failed
(3) Seat back folding locks or "seat back" failed (specify):_____
(4) Seat track/anchors failed
(5) Deformed by impact of occupant
(6) Deformed by passenger compartment intrusion, (specify):_____
_____
(7) Combination of above (specify):
_____
(8) Other (specify): _____
(9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 0
(000) No child safety seat
Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):
_____
(998) Unknown make/model
(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat - with shield
(5) Booster seat - without shield
(7) Other type child safety seat (specify):
_____
(8) Unknown child safety seat type
(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0
(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):
_____
(09) Unknown orientation

Designed For Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):
_____
(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):
_____
(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 0

59. Child Safety Seat Shield Usage 0 0

60. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.
(00) No child safety seat

Not Designed With Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 4

(0) O - No injury
(1) C - Possible injury
(2) B - Nonincapacitating injury
(3) A - Incapacitating injury
(4) K - Killed
(5) U - Injury, severity unknown
(6) Died prior to accident
(9) Unknown

62. Treatment - Mortality 1

(0) No treatment
(1) Fatal
(2) Fatal - ruled disease (specify):

_____

Nonfatal
(3) Hospitalization
(4) Transported and released
(5) Treatment at scene - nontransported
(6) Treatment later
(7) Treatment - other (specify):

_____

(8) Transported to a medical facility-unknown if treated
(9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

(0) Not treated at a medical facility
(1) Trauma center
(2) Hospital
(3) Medical clinic
(4) Physician's office
(5) Treatment later at medical facility
(8) Other (specify):

_____

(9) Unknown

64. Hospital Stay 00

(00) Not Hospitalized
_____Code the number of days (up through 60) that the occupant stayed in hospital.
(61) 61 days or more
(99) Unknown

65. Working Days Lost 97

_____Code the number of days (up through 60) that the occupant lost from work due to the accident
(00) No working days lost
(61) 61 days or more
(62) Fatally injured
(97) Not working prior to accident
(99) Unknown

STOP WORK HERE

VARIABLES 66-74

TO BE CODED BY THE ZONE CENTER

TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES

66. Time to Death 01
____Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 +n up through 30 days = 60)
(00) Not fatal 32 minutes
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death 01

68. 2nd Medically Reported Cause of Death 02

69. 3rd Medically Reported Cause of Death 10
____Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
(00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):
_____
(97) Other result (includes fatal ruled disease) (specify):
_____
(99) Unknown

70. Number of Recorded Injuries for This Occupant 09
9 Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 02
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood? 1
(1) No - blood not given
(2) Yes - blood given
(specify units):_____
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) – HCO_3 01
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported , HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):_____
(9) Unknown if belt used

NASS CDS Occupant Injury Form:
Case Vehicle Right Front Passenger

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	10	3. Vehicle Number	01
2. Case Number - Stratum	9625	4. Occupant Number	02

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
Cervical Fx	1st 5. 3	6. 6	7. 5	8. 02	9. 16	10. 2	11. 6	12. 180	13. 1	14. 1	15. 00
Abrasions (R) face	2nd 16. 8	17. 2	18. 9	19. 02	20. 02	21. 1	22. 1	23. 180	24. 1	25. 1	26. 00
Abrasion anterior neck	3rd 27. 3	28. 3	29. 9	30. 02	31. 02	32. 1	33. 4	34. 180	35. 1	36. 1	37. 00
Contusions anterior neck + lower chin	4th 38. 3	39. 3	40. 9	41. 04	42. 02	43. 1	44. 4	45. 180	46. 1	47. 1	48. 00
Contusion (R) rib area	5th 49 3	50. 4	51. 9	52. 04	53. 02	54. 1	55. 2	56. 180	57. 1	58. 1	59. 00
Contusion (R) clavicle	6th 60. 3	61. 7	62. 9	63. 04	64. 02	65. 1	66. 1	67. 180	68. 1	69. 1	70. 00
Contusions bilateral axillary areas	7th 71. 3	72. 7	73. 9	74. 04	75. 02	76. 1	77. 3	78. 180	79. 1	80. 1	81. 00
Internal Injuries	8th 82. 3	83. 4	84. 1	85. 50	86. 99	87. 7	88. 0	89. 697	90. 9	91. 7	92. 99
	9th 93. 3	94. 5	95. 1	96. 50	97. 99	98. 7	99. 0	100. 697	101. 9	102. 7	103. 99
	10th 104	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.

HS Form 433B (1/96)

This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
11th											
12th											
13th											
14th											
15th											
16th											
17th											
18th											
19th											
20th											
21st											
22nd											
23rd											
24th											
25th											

OCCUPANT INJURY CLASSIFICATION

Body Region

(1) Head
(2) Face
(3) Neck
(4) Thorax
(5) Abdomen
(6) Spine
(7) Upper Extremity
(8) Lower Extremity
(9) Unspecified

Type of Anatomic Structure

(1) Whole Area
(2) Vessels
(3) Nerves
(4) Organs (includes Muscles/ligaments)
(5) Skeletal (includes joints)
(6) Head - LOC
(9) Skin

Specific Anatomic Structure

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02.

The exceptions to this rule apply to:

Whole Area
(02) Skin - Abrasion
(04) Skin - Contusion
(06) Skin - Laceration
(08) Skin - Avulsion
(10) Amputation
(20) Burn
(30) Crush
(40) Degloving
(50) Injury - NFS
(90) Trauma, other than mechanical

Head - LOC
(02) Length of LOC
(04) Level
(06) of
(08) Consciousness
(10) Concussion

Spine
(02) Cervical
(04) Thoracic
(06) Lumbar

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

(1) Minor Injury
(2) Moderate Injury
(3) Serious Injury
(4) Severe Injury
(5) Critical Injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

Aspect

(1) Right
(2) Left
(3) Bilateral
(4) Central
(5) Anterior
(6) Posterior
(7) Superior
(8) Inferior
(9) Unknown
(0) Whole region

SOURCE OF INJURY DATA

OFFICIAL RECORDS
(1) Autopsy records with or without hospital/medical records
(2) Hospital/medical records other than emergency room (e.g., discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS
(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify): _____
(9) Police

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

- Passenger side air bag deployed (EN, CN, CR)

Restrained?

✓No (CN, ET)

✓Yes (EN)

Blood Alcohol Level (mg/dl)

BAL = ____

Glasgow Coma Scale Score

GCSS = ____

ISGH

Units of Blood Given

Units = ____

Arterial Blood Gases

pH = ____

PO_2 = ____

PCO_2 ____

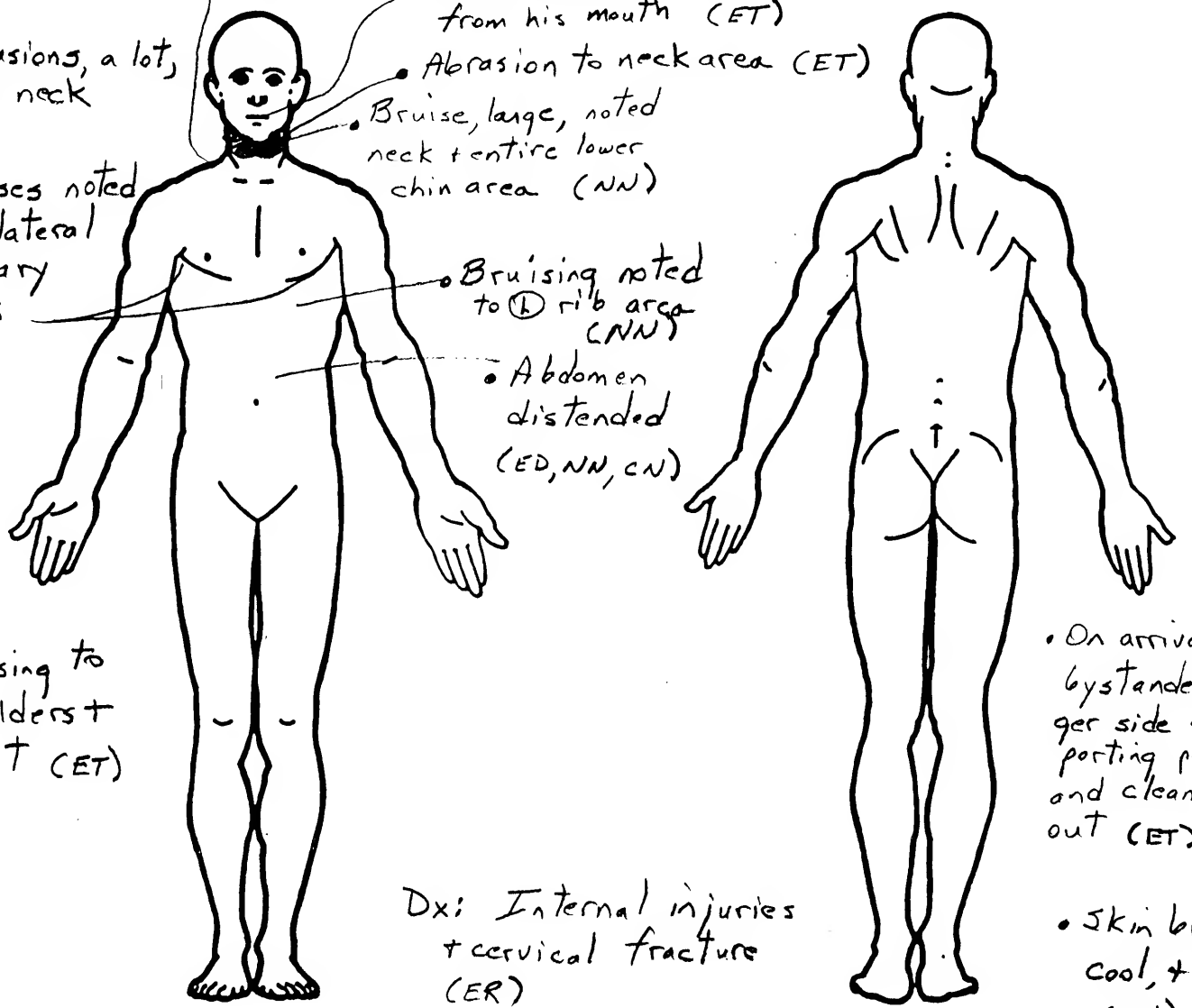
HCO_3 ____

- 6 year-old white male (EN, ED, ET, CR)

- Found unbelted on passenger side, windshield cracked by passenger (CN
- No response to fluids or medications, pronounced dead [32 minutes] post-crash (ER, NN, CN

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- No seat belt in place (ET)

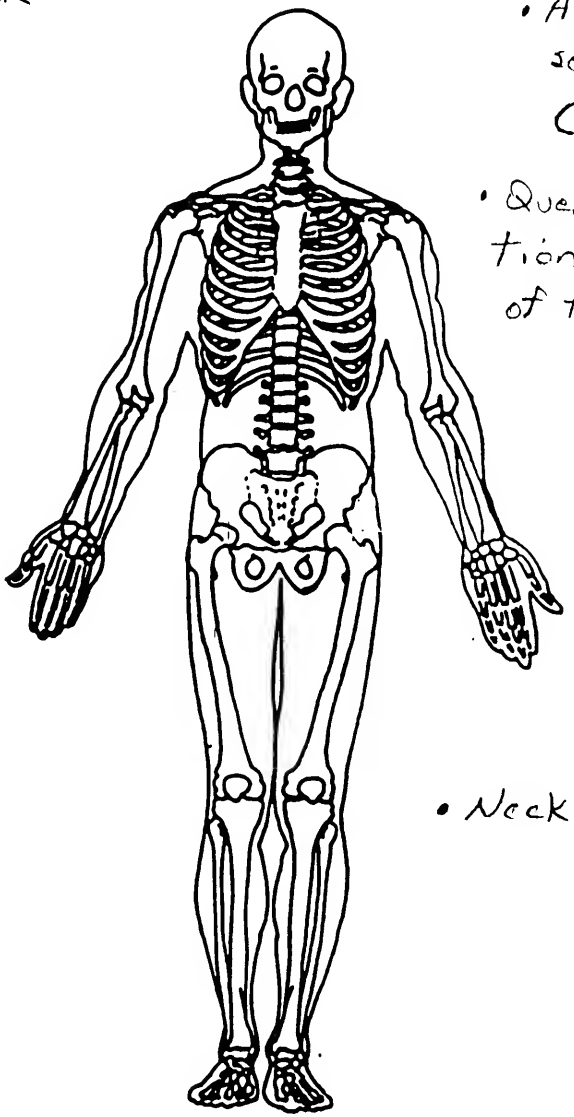


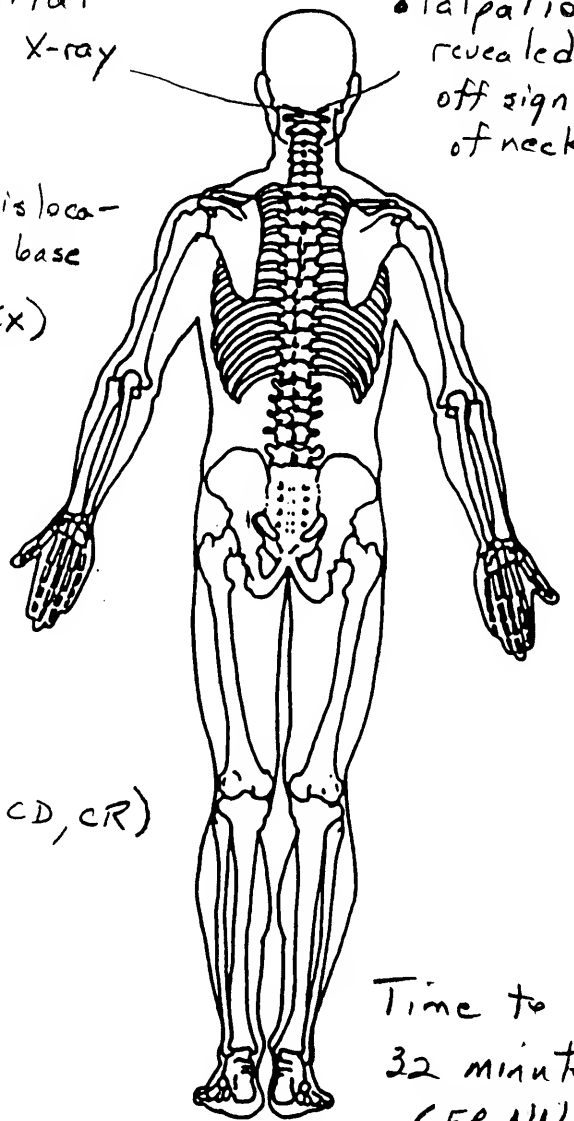
- On arrival found a bystander @ passenger side of car supporting patient's neck and cleaning his airway out (ET)
- Skin bruised, cool, + dry (NN)

OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- Broken neck (CR)
- Atlanto-occipital separation on X-ray (CN)
- Questionable dislocation C_1 and the base of the skull (EX)
- Palpation of neck revealed a step off sign @ base of neck (CN)





- Neck injury (CD, CR)

Time to Death: 32 minutes (ER, NN, CD, CR)

LSI

INJURY SOURCES

FRONT
(001) Windshield
(002) Mirror
(003) Sunvisor
(004) Steering wheel rim
(005) Steering wheel hub/spoke
(006) Steering wheel (combination of codes 004 and 005)
(007) Steering column, transmission selector lever, other attachment
(008) Cellular telephone or CB radio
(009) Add on equipment (e.g., tape deck, air conditioner)
(010) Left instrument panel and below
(011) Center instrument panel and below
(012) Right instrument panel and below
(013) Glove compartment door
(014) Knee bolster
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
(017) Windshield reinforced by exterior object (specify)
_____
(019) Other front object (specify):
_____

LEFT SIDE
(051) Left side interior surface, excluding hardware or armrests
(052) Left side hardware or armrest
(053) Left A (A1/A2)-pillar
(054) Left B-pillar
(055) Other left pillar (specify):
_____
(056) Left side window glass
(057) Left side window frame
(058) Left side window sill
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(060) Other left side object (specify):
_____

RIGHT SIDE
(101) Right side interior surface, excluding hardware or armrests
(102) Right side hardware or armrest
(103) Right A (A1/A2)-pillar
(104) Right B-pillar
(105) Other right pillar (specify):
_____
(106) Right side window glass
(107) Right side window frame
(108) Right side window sill
(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(110) Other right side object (specify):
_____

INTERIOR
(151) Seat, back support
(152) Belt restraint webbing/buckle
(153) Belt restraint B-pillar or door frame attachment point
(154) Other restraint system component (specify):
_____
(155) Head restraint system
(160) Other occupants (specify):
_____
(161) Interior loose objects
(162) Child safety seat (specify):
_____
(163) Other interior object (specify):
_____

AIR BAG
(170) Air bag-driver side
(171) Air bag-driver side and eyewear
(172) Air bag-driver side and jewelry
(173) Air bag-driver side and object held
(174) Air bag-driver side and object in mouth
(175) Air bag compartment cover-driver side
(176) Air bag compartment cover-driver side and eyewear
(177) Air bag compartment cover-driver side and jewelry
(178) Air bag compartment cover-driver side and object held
(179) Air bag compartment cover-driver side and object in mouth
(180) Air bag-passenger side
(181) Air bag-passenger side and eyewear
(182) Air bag-passenger side and jewelry
(183) Air bag-passenger side and object held
(184) Air bag-passenger side and object in mouth
(185) Air bag compartment cover-passenger side
(186) Air bag compartment cover-passenger side and eyewear
(187) Air bag compartment cover-passenger side and jewelry
(188) Air bag compartment cover-passenger side and object held
(189) Air bag compartment cover-passenger side and object in mouth
(190) Other air bag (specify)
_____
(195) Other air bag compartment cover (specify)
_____

ROOF
(201) Front header
(202) Rear header
(203) Roof left side rail
(204) Roof right side rail
(205) Roof or convertible top

FLOOR
(251) Floor (including toe pan)
(252) Floor or console mounted transmission lever, including console
(253) Parking brake handle
(254) Foot controls including parking brake

REAR
(301) Backlight (rear window)
(302) Backlight storage rack, door, etc.
(303) Other rear object (specify):
_____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT
(401) Hand controls for braking/acceleration
(402) Steering control devices (attached to OEM steering wheel)
(403) Steering knob attached to steering wheel
(405) Replacement steering wheel (i.e., reduced diameter)
(406) Joy stick steering controls
(407) Wheelchair tie-downs
(408) Modification to seat belts, (specify): _____
(409) Additional or relocated switches, (specify):
_____
(410) Raised roof
(411) Wall mounted head rest (used behind wheel chair)
(412) Other adaptive device (specify):_____
_____

EXTERIOR of OCCUPANT'S VEHICLE
(451) Hood
(452) Outside hardware (e.g., outside mirror, antenna)
(453) Other exterior surface or tires (specify):
_____
_____
(454) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE
(501) Front bumper
(502) Hood edge
(503) Other front of vehicle (specify):
_____
(504) Hood
(505) Hood ornament
(506) Windshield, roof rail, A-pillar
(507) Side surface
(508) Side mirrors
(509) Other side protrusions (specify):
_____
(510) Rear surface
(511) Undercarriage
(512) Tires and wheels
(513) Other exterior of other motor vehicle (specify): _____
_____
(514) Unknown exterior of other motor vehicle

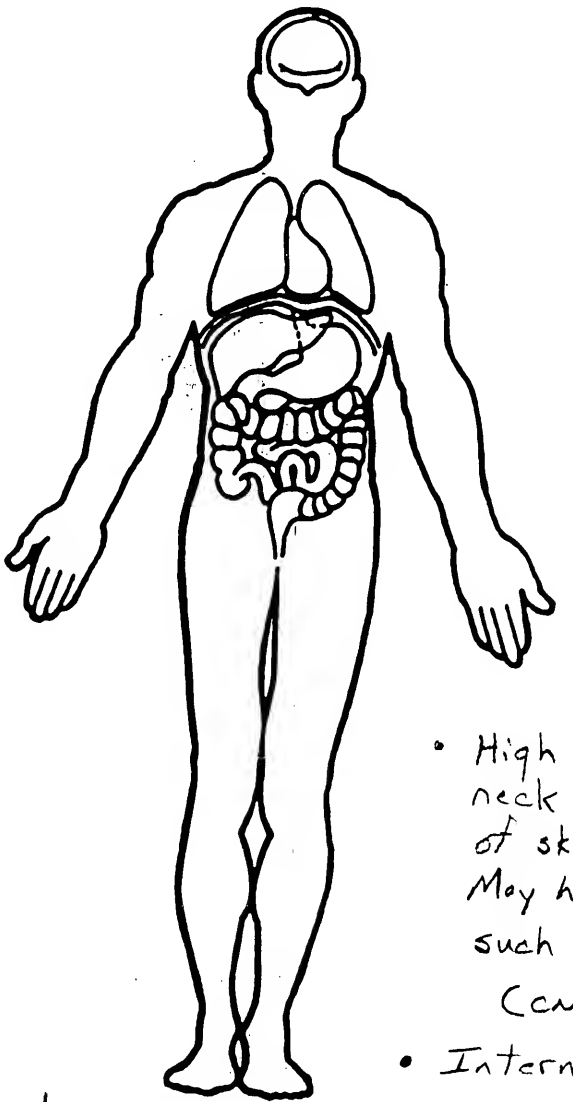
OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT
(551) Ground
(598) Other vehicle or object (specify):
_____
(599) Unknown vehicle or object

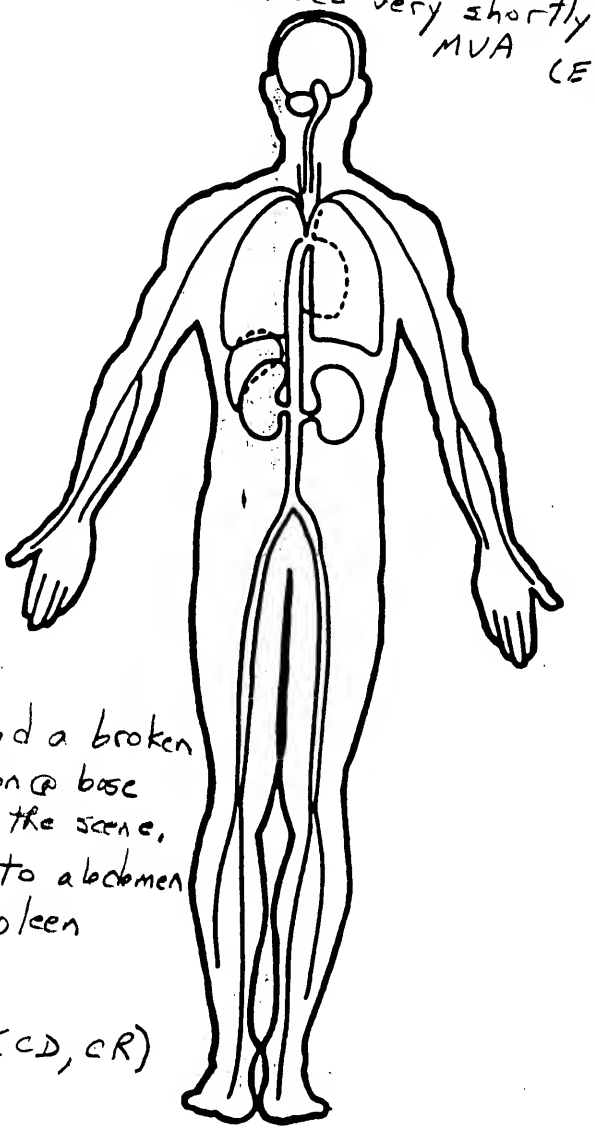
NONCONTACT INJURY
(601) Fire in vehicle
(602) Flying glass
(603) Other noncontact injury source (specify): _____
(604) Air bag exhaust gases
(697) Injured, unknown source

OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- arrived in full cardiopulmonary arrest (EN, CN)
- Pupils dilated + fixed (ED, NN, CN)
- In full code @ scene (CN)
- Apneic + without cardiac electrical activity when EMTs arrived very shortly post-MVA (ED)





- High chance child had a broken neck with dislocation @ base of skull and C_1 — at the scene. May have had trauma to abdomen such as a ruptured spleen (CN)
- Internal injuries (CD, CR)

No Autopsy! (RS, CR)

851

CAUSE OF DEATH

Neck injury and internal injuries (CD, ER)

ICD-9-CM

OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
___ Blood and urine tests ___ Blood test only ___ Urine test only ___ Other test ___ Unspecified		

MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy–medical information based upon an invasive examination of a body
ME	Medical examiner's record–where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary–any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet–face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary–shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record–summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
PX	Radiographic records–taken after the patient has been admitted, or while in surgery or intensive care
PN	Patient progress notes–supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam–medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record–consultations are in essence additional history and physicial exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report–where the author of this information is undefined
EN	Emergency room nurse–"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor–"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes–supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records–taken during the patients stay in the emergency room
CV	Coroner's verdict–statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report–medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician–report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source–medical information based on an other source (e.g., newspaper, DVM–Doctor of Veterinary Medicine)

CD = Certificate of Death RS = Release Statement

NASS CDS Occupant Assessment Form: Case Vehicle Right Rear Passenger

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT ASSESSMENT FORM

Form Approved
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9625
3. Vehicle Number: 01
4. Occupant Number: 03

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 09
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older
(99) Unknown

6. Occupant's Sex: 1
(1) Male
(2) Female-not reported pregnant
(3) Female-pregnant-1st trimester(1st-3rd month)
(4) Female-pregnant-2nd trimester(4th-6th month)
(5) Female-pregnant-3rd trimester(7th-9th month)
(6) Female-pregnant-term unknown
(9) Unknown

7. Occupant's Height: 137
Code actual height to the nearest centimeter.
(999) Unknown
54 inches X 2.54 = 137.16 centimeters

8. Occupant's Weight: 038
Code actual weight to the nearest kilogram.
(999) Unknown
84 pounds X .4536 = 38.10 kilograms

9. Occupant's Role: 2
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position: 23
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown

11. Occupant's Posture: 0
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in front of seat
(8) Other abnormal posture (specify): _____
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection — 0
    (0) No ejection
    (1) Complete ejection
    (2) Partial ejection
    (3) Ejection, unknown degree
    (9) Unknown

13. Ejection Area — 0
    (0) No ejection
    (1) Windshield
    (2) Left front
    (3) Right front
    (4) Left rear
    (5) Right rear
    (6) Rear
    (7) Roof
    (8) Other area (e.g., back of pickup, etc.) (specify):_____
    (9) Unknown

14. Ejection Medium — 0
    (0) No ejection
    (1) Door/hatch/tailgate
    (2) Nonfixed roof structure
    (3) Fixed glazing
    (4) Nonfixed glazing (specify):_____
    (5) Integral structure
    (8) Other medium (specify):_____
    (9) Unknown

15. Medium Status (Immediately Prior To Impact) — 0
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment — 0
    (0) Not entrapped/exit not inhibited
    (1) Entrapped/pinned - mechanically restrained
    (2) Could not exit vehicle due to jammed doors, fire, etc. (specify):_____
    (9) Unknown

17. Occupant Mobility — 4
    (0) Occupant fatal before removed from vehicle
    (1) Removed from vehicle while unconscious or not oriented to time or place
    (2) Removed from vehicle due to perceived serious injuries
    (3) Exited vehicle with some assistance
    (4) Exited vehicle under own power
    (5) Occupant fully ejected
    (8) Removed from vehicle for other reasons (specify):_____
    (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability — 4
(0) None available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available—type unknown

Integral Belt Partially Destroyed
(6) Shoulder belt (lap belt destroyed/removed)
(7) Lap belt (shoulder belt destroyed/removed)
(8) Other belt (specify): _____
(9) Unknown

19. Manual (Active) Belt System Use — 04
(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify): _____
(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used—type unknown
(08) Other belt used (specify): _____
(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat—type unknown
(18) Other belt used with child safety seat (specify): _____
(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts — 1
(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

Belt Used Improperly
(3) Shoulder belt worn under arm
(4) Shoulder belt worn behind back or seat
(5) Belt worn around more than one person
(6) Lap belt worn on abdomen
(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of manual belt system (specify): _____
(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident — 1
(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other manual belt failure (specify): _____
(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment — 1
(0) No manual shoulder belt
(1) No upper anchorage adjustment for manual shoulder belt

Adjustable shoulder Belt Upper Anchorage
(2) In full up position
(3) In mid position
(4) In full down position
(5) Position unknown
(9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/ Function — 0
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

24. Automatic (Passive) Belt System Use — 0
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
(3) Automatic belt use unknown
(9) Unknown

25. Automatic (Passive) Belt System Type — 0
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

26. Proper Use of Automatic (Passive) Belt System — 0
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of automatic belt system (specify): _____
(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident — 0
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify): _____
(9) Unknown

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 4
    (0) None used
    (1) Police did not indicate belt use
    (2) Shoulder belt
    (3) Lap belt
    (4) Lap and shoulder belt
    (5) Belt used, type not specified
    (6) Child safety seat
    (7) Automatic belt
    (8) Other type belt, (specify):

    _____

    (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 0
    (0) No air bag available
    (1) Police did not indicate air bag availability/function
    (2) Deployed
    (3) Not deployed
    (4) Unknown if deployed
    (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

[X] Vehicle inspection
[ ] Official injury data
[ ] Driver/occupant interview
[ ] Other (specify):

_____

[ ] Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify):

    _____

    (3) Air bag not reinstalled
    (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Deployed during accident (as a result of impact)
    (2) Deployed inadvertently just prior to accident
    (3) Deployed, details unknown
    (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
    (5) Unknown if deployed
    (7) Nondeployed
    (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify):

    _____

    (3) Air bag not reinstalled
    (9) Unknown

    Specify type of "other" air bag present:

    _____

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0
    (0) Not equipped with an "other" air bag
    (1) Deployed during accident (as a result of impact)
    (2) Deployed inadvertently just prior to accident
    (3) Deployed, details unknown
    (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
    (5) Unknown if deployed
    (7) Nondeployed
    (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 0
    (0) Not equipped/not available
    (1) No
    (2) Yes (specify):

    _____

    (9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0
(0) Not equipped/not available
(1) No previous accidents

Yes
(2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 0
(0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0
(0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify): _____
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 0 0
(00) Not equipped/not available
_____ Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 0
(0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____
(6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + - 0 0 0
(_000) Not equipped/not available
Code the value of the delta V for the impact that initiated the air bag deployment
(_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0
(0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 0 0
(00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage
(02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify): _____
(95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION *continued*

44. Source of Air Bag Damage 00
(00) Not equipped/not available
(01) Not damaged
(02) Object worn by occupant, (specify):
(03) Object carried by occupant, (specify):
(04) Adaptive/assistive controls, (specify):
(05) Fire in vehicle
(06) Thermal burns
(07) Rescue or emergency efforts
(88) Other damage source (specify):
(95) Damaged, unknown source
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

45. Was The Air Bag Tethered? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify number of tether straps):
(3) Deployed, unknown if tethered
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

46. Did The Air Bag Have Vent Ports? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify number of vent ports):
(3) Deployed, unknown if vent ports present
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify):
(3) Deployed, unknown if other occupant contact to air bag
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

48. Was This Occupant Wearing Eye-wear? 0
(0) Not air bag equipped/air bag not available
(1) No
(2) Eyeglasses/sunglasses
(3) Contact lenses
(4) Deployed, unknown if eyewear worn
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 1
(0) No head restraints
(1) Integral—no damage
(2) Integral—damaged during accident
(3) Adjustable—no damage
(4) Adjustable—damaged during accident
(5) Add-on—no damage
(6) Add-on—damaged during accident
(8) Other (specify):
(9) Unknown

50. Seat Type (this Occupant Position) 07
(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Box mounted seat (i.e., van type)
(10) Other seat type (specify):
(99) Unknown

51. Seat Orientation (this Occupant Position) 1
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):
(9) Unknown

52. Seat Track Adjusted Position Prior To Impact 1
(0) Occupant not seated or no seat
(1) Non-adjustable seat track

Adjustable Seat Track
(2) Seat at forward most track position
(3) Seat between forward most and middle track positions
(4) Seat at middle track position
(5) Seat between middle and rear most track positions
(6) Seat at rear most track position
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

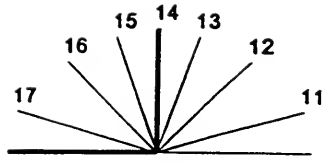
53. Seat Back Incline Prior and Post Impact 01
    (00) Occupant not seated or no seat
    (01) Not adjustable

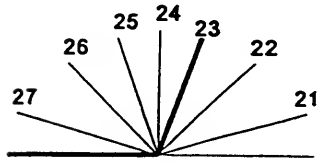
    Upright prior to impact
    (11) Moved to completely rearward position
    (12) Moved to rearward midrange position
    (13) Moved to slightly rearward position
    (14) Retained pre-impact position
    (15) Moved to slightly forward position
    (16) Moved to forward midrange position
    (17) Moved to completely forward position

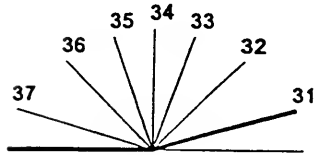
    Slightly reclined prior to impact
    (21) Moved to completely rearward position
    (22) Moved to rearward midrange position
    (23) Retained pre-impact position
    (24) Moved to upright position
    (25) Moved to slightly forward position
    (26) Moved to forward midrange position
    (27) Moved to completely forward position

    Completely reclined prior to impact
    (31) Retained pre-impact position
    (32) Moved to rearward midrange position
    (33) Moved to slightly rearward position
    (34) Moved to upright position
    (35) Moved to slightly forward position
    (36) Moved to forward midrange position
    (37) Moved to completely forward position

    (99) Unknown







54. Seat Performance (this Occupant Position) 1
    (0) Occupant not seated or no seat
    (1) No seat performance failure(s)
    (2) Seat adjusters failed
    (3) Seat back folding locks or "seat back" failed (specify):_____
    (4) Seat track/anchors failed
    (5) Deformed by impact of occupant
    (6) Deformed by passenger compartment intrusion, (specify):_____
    _____
    (7) Combination of above (specify):
    _____
    (8) Other (specify): _____
    (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 0
(000) No child safety seat
Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify): _____
(998) Unknown make/model
(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat - with shield
(5) Booster seat - without shield
(7) Other type child safety seat (specify): _____
(8) Unknown child safety seat type
(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0
(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(08) Other orientation (specify): _____
(09) Unknown orientation

Designed For Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify): _____
(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify): _____
(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 0

59. Child Safety Seat Shield Usage 0 0

60. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.
(00) No child safety seat

Not Designed With Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 0

(0) O - No injury
(1) C - Possible injury
(2) B - Nonincapacitating injury
(3) A - Incapacitating injury
(4) K - Killed
(5) U - Injury, severity unknown
(6) Died prior to accident
(9) Unknown

62. Treatment - Mortality 0

(0) No treatment
(1) Fatal
(2) Fatal - ruled disease (specify):

_____

Nonfatal
(3) Hospitalization
(4) Transported and released
(5) Treatment at scene - nontransported
(6) Treatment later
(7) Treatment - other (specify):

_____

(8) Transported to a medical facility-unknown if treated
(9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 0

(0) Not treated at a medical facility
(1) Trauma center
(2) Hospital
(3) Medical clinic
(4) Physician's office
(5) Treatment later at medical facility
(8) Other (specify):

_____

(9) Unknown

64. Hospital Stay 00

(00) Not Hospitalized
_____Code the number of days (up through 60) that the occupant stayed in hospital.
(61) 61 days or more
(99) Unknown

65. Working Days Lost 97

_____Code the number of days (up through 60) that the occupant lost from work due to the accident
(00) No working days lost
(61) 61 days or more
(62) Fatally injured
(97) Not working prior to accident
(99) Unknown

STOP WORK HERE

VARIABLES 66-74

TO BE CODED BY THE ZONE CENTER

TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES

66. Time to Death **0 0**
____Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 +n up through 30 days = 60)
(00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death **0 0**

68. 2nd Medically Reported Cause of Death **0 0**

69. 3rd Medically Reported Cause of Death **0 0**
____Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
(00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):
_____
(97) Other result (includes fatal ruled disease) (specify):
_____
(99) Unknown

70. Number of Recorded Injuries for This Occupant **0 0**
____Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) **0 0**
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood? **1**
(1) No - blood not given
(2) Yes - blood given
(specify units):_____
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) – HCO_3 **0 0**
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported , HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination **1**
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):_____
(9) Unknown if belt used